Drug & Cosmetic INDUSTRY

JULY, 1950

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FRANCIS CHILSON, Production Consultant
MILTON A. LESSER, Technical Editor
HARRY G. KELBLY, Raw Material Editor
FRANK CHILD III, News Editor
HILDA C. McCOLLOM, Art Director

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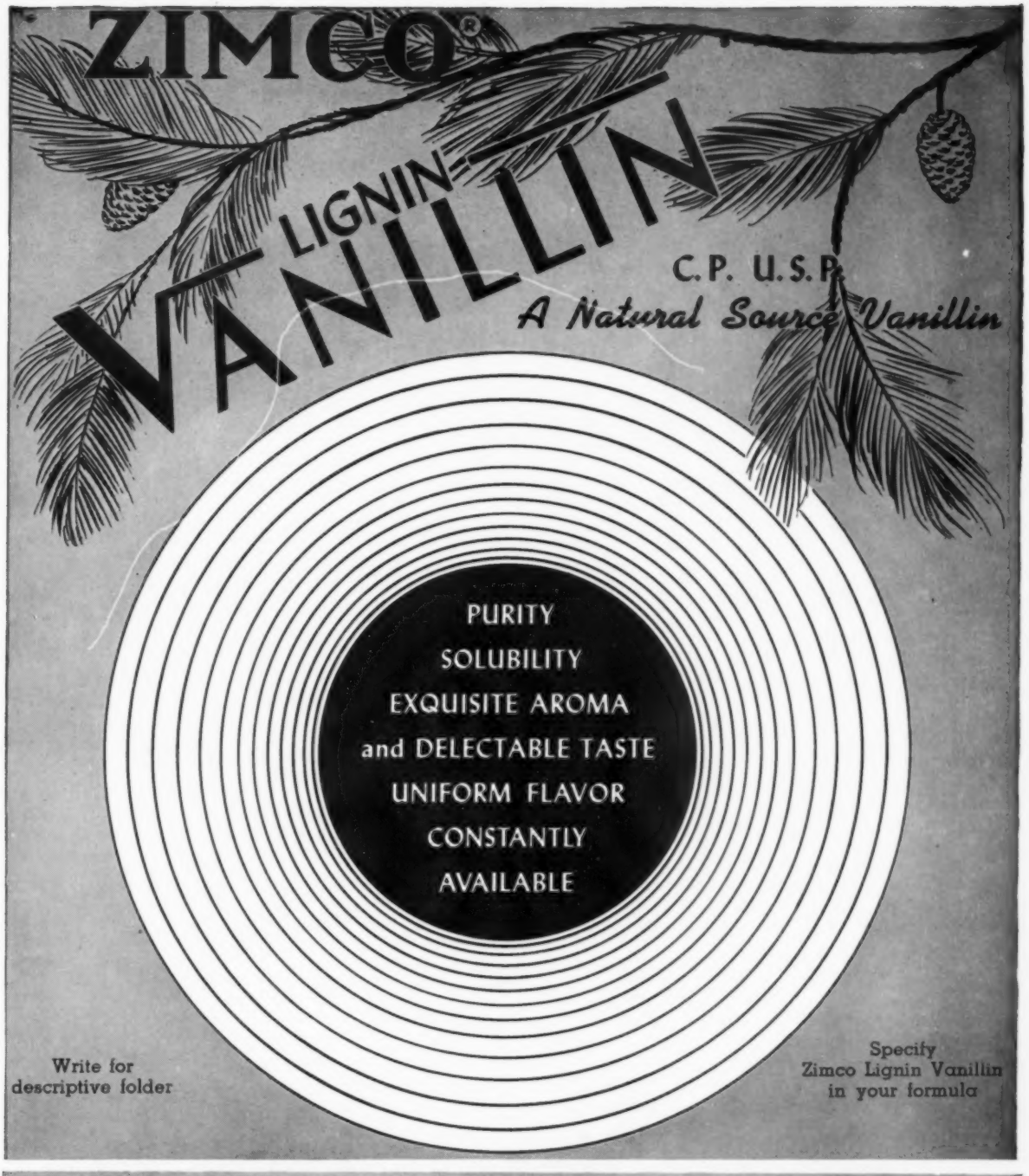

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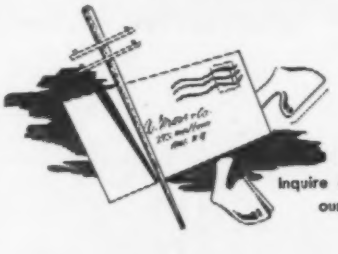

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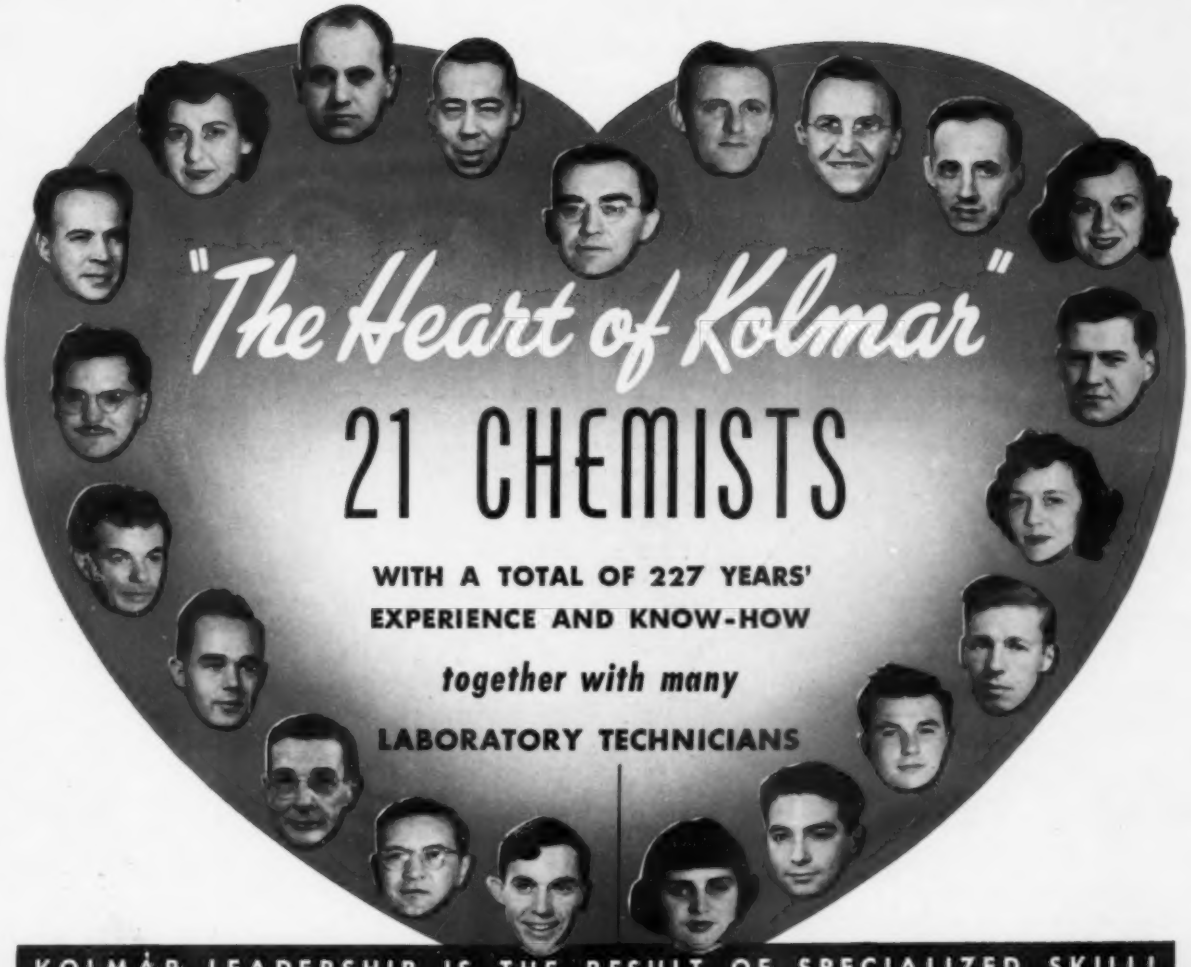
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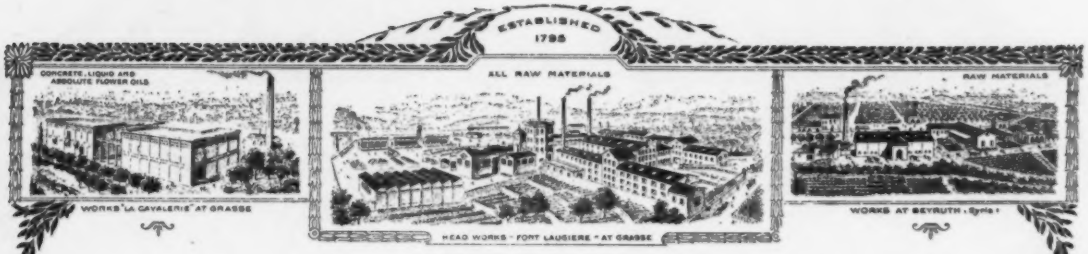

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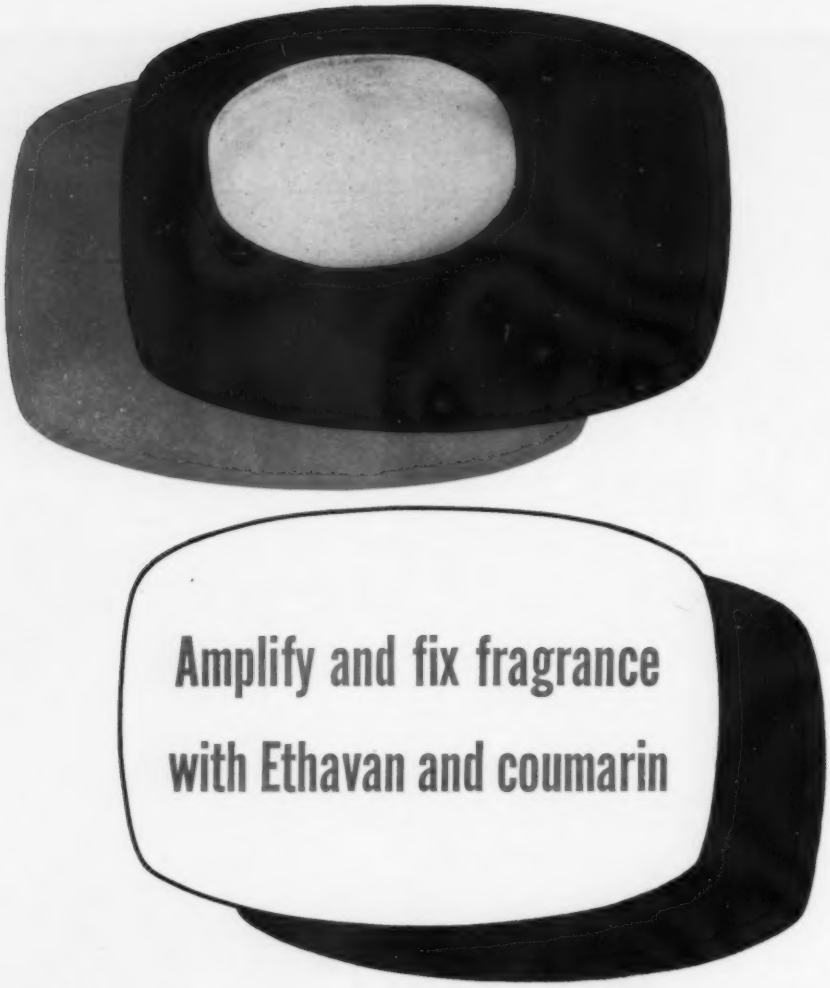

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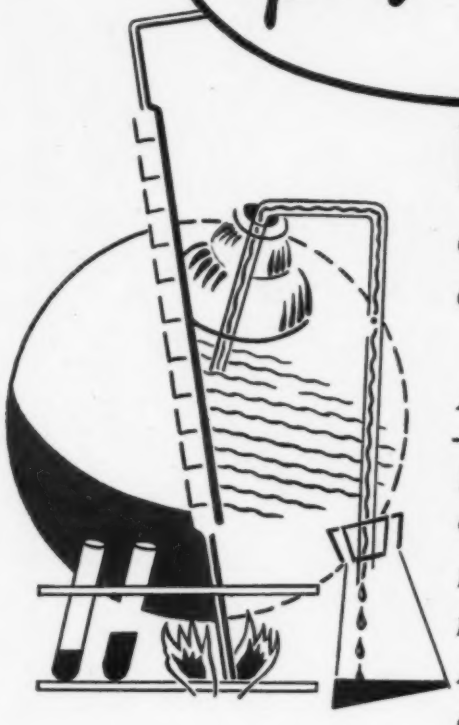

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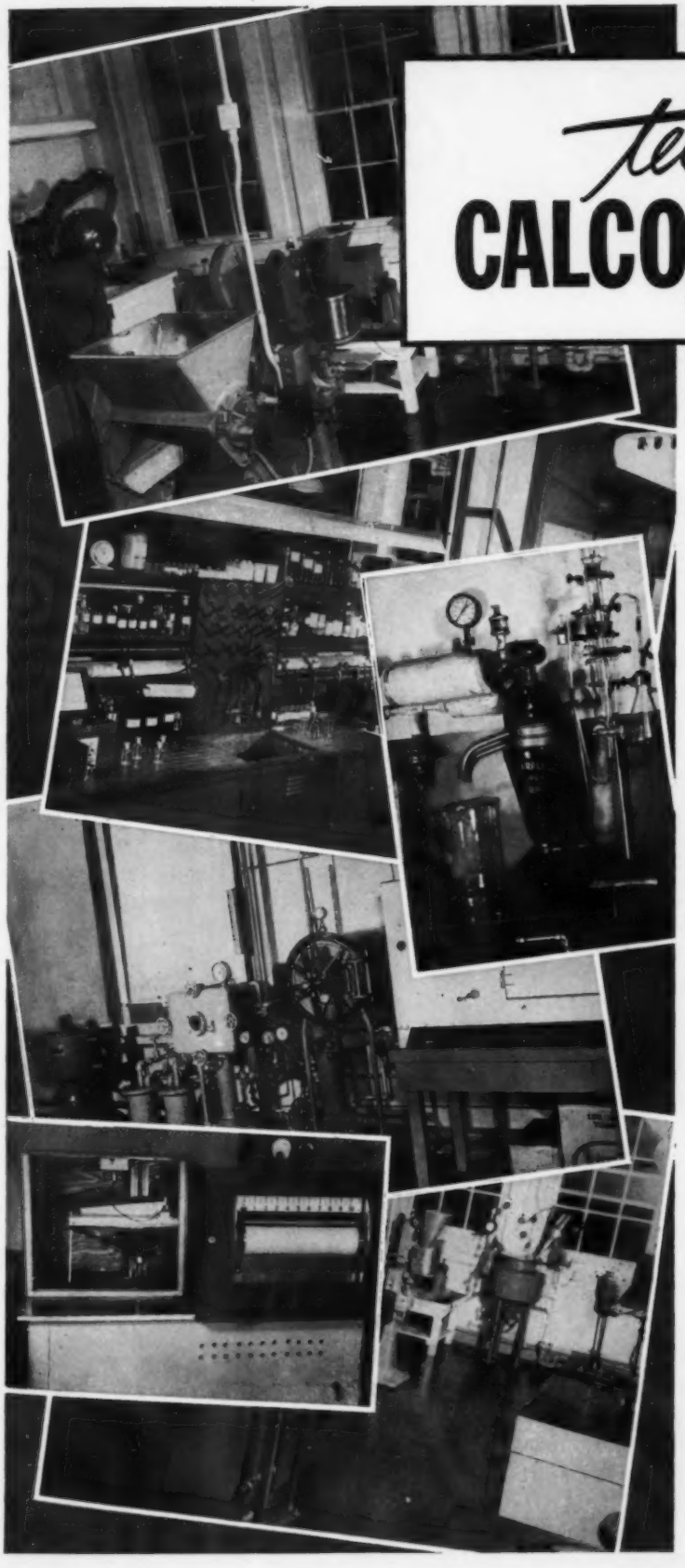

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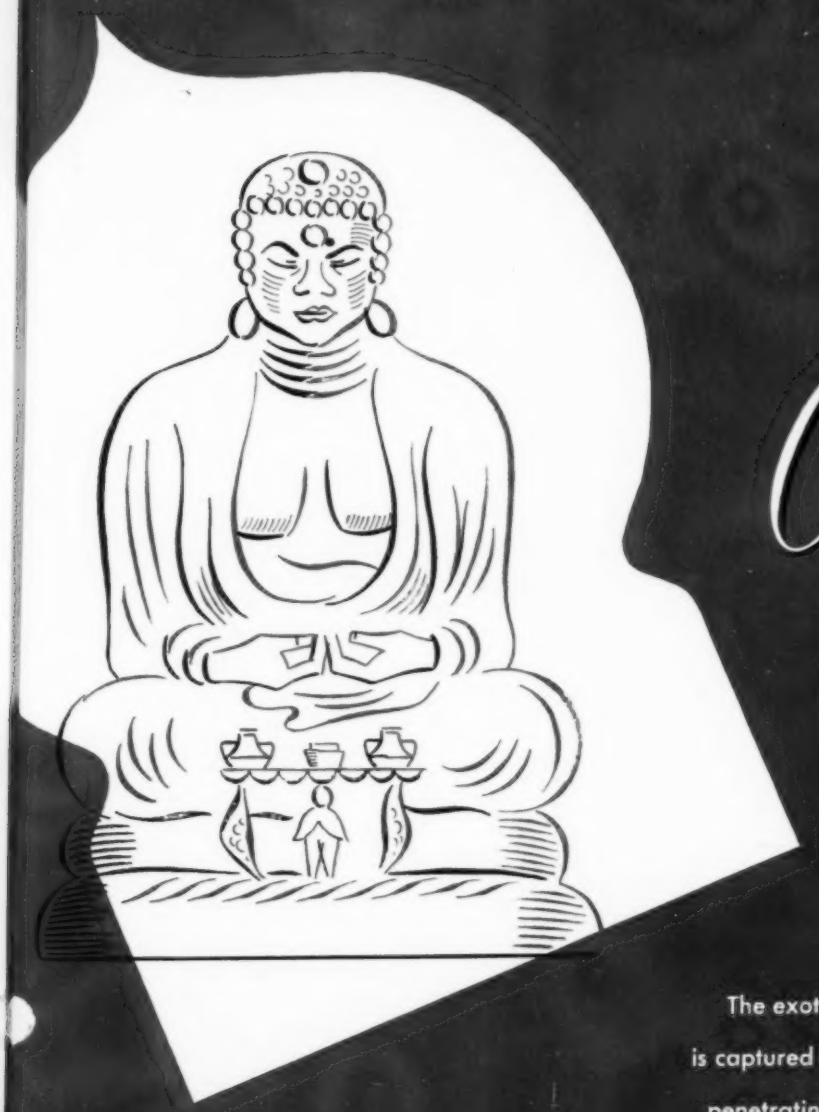

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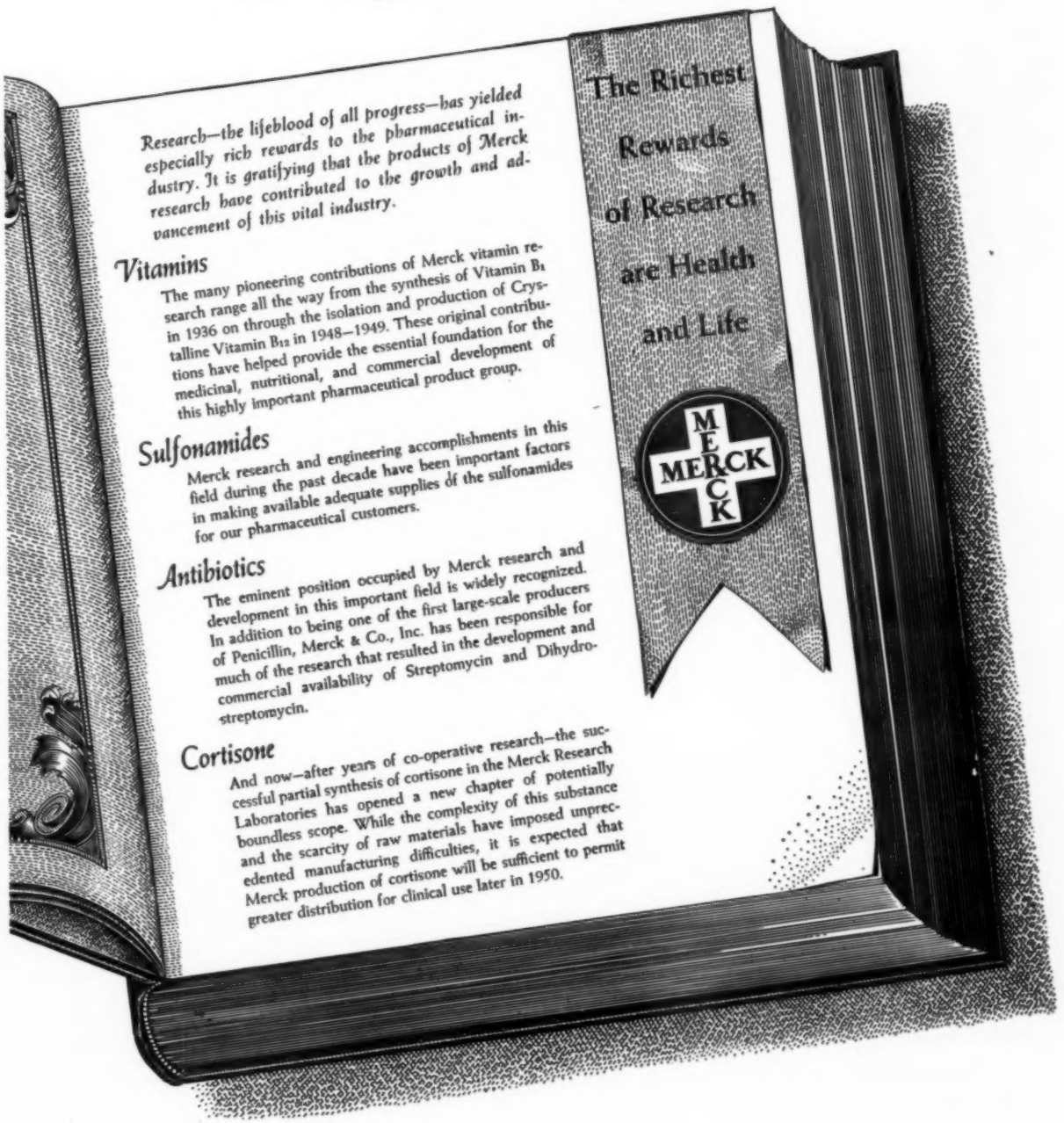
Through Pioneering Research



Research—the lifeblood of all progress—has yielded especially rich rewards to the pharmaceutical industry. It is gratifying that the products of Merck research have contributed to the growth and advancement of this vital industry.

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The many pioneering contributions of Merck vitamin research range all the way from the synthesis of Vitamin B_1 in 1936 on through the isolation and production of Crystalline Vitamin B_{12} in 1948–1949. These original contributions have helped provide the essential foundation for the medicinal, nutritional, and commercial development of this highly important pharmaceutical product group.

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I want to do more than just send you an order which would only mean that your goods are at rest in that store. I like to sell and my idea of selling is to keep your goods moving through the store to Miss and Mrs. Public.

I would expect you to give me a clear, concise story of your product—its quality, competitive advantages and selling points. I would need to know your advertising program, so that I can build up in the mind of these retail folks the expectation of substantial consumer interest. I want also to know about your company policies so that I can win friendly admiration for your products and your company.

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Let me carry the kind of message which encourages retail display for your product and friendly, informed selling behind the counter and you will soon see results in increased retail orders.

I have been selling perfumes and cosmetics for over 33 years. Any good retailer will give you a reference.

My name is BEAUTY FASHION:

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rich Jasmine in
full bloom with the fascinating

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. . . A favorite from out of the past . . .
down through the years . . . As lasting
and appealing as ever in the most modern
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These qualities must be

PERFECTLY MATCHED

in a well-balanced perfume

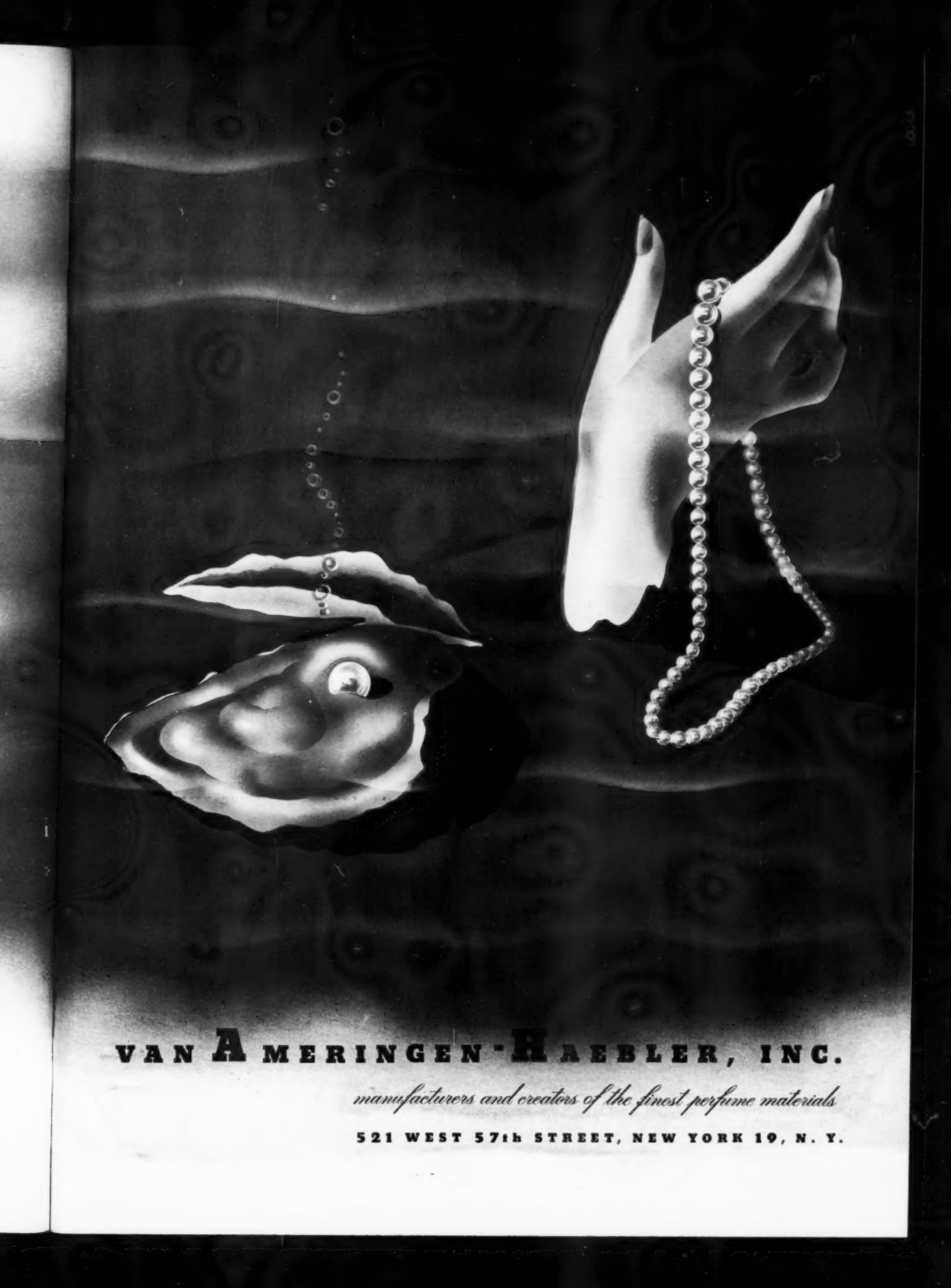
BEAUTY ... of immediate appeal

DIFFUSION ... that property of a perfume to "reach out"

ODOR LIFE ... a perfume should retain its character throughout its life

LASTING QUALITY ... properly tuned to the creation

When developing your new creation, talk it over with those who know perfume



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Warner Selling Stock to Public

IN STEADILY increasing numbers, the privately owned companies in this industry are offering their securities to outside investors. In February part of the stock of G. D. Searle & Co. was sold to outside buyers, and now a public offering of the common stock of William R. Warner & Co. is being planned. Warner is reclassifying the present outstanding 6 per cent first preferred stock and the classes of common stock into shares of newly authorized 4½ per cent cumulative preferred stock of $100 par value, and common stock of $1 par value. The company has been arranging for the purchase of $5 million par amount of its first preferred held by various institutions.

After buying back this stock and changing the type of shares of common and preferred, the company has authorized stock of 100,000 shares of 4½ per cent preferred, and 1,500,000 shares of common stock, with 82,677 of the preferred and 856,302 of the common outstanding. Now the company plans to file with the SEC to sell about 325,000 shares of the common stock through an underwriting headed by F. Eberstadt & Co.

Company sales for 1949 totaled $39,497,539, against 1948 sales of $36,017,023, according to Warner President Elmer H. Bobst.

Support for World Medical Association

IF DRUG and pharmaceutical manufacturers—especially those with business in foreign countries—understand what the World Medical Association is, and what its aims and potential accomplishments are, they will contribute freely to its support, is the opinion recently expressed by Elmer H. Bobst, president of William R. Warner & Co. Mr. Bobst is intensely interested in the success of the WMA, and is devoting much time in an effort to greatly increase the support given to it by the pharmaceutical manufacturing industry.

Many are confused about the relationship of the World Health Organization and World Medical Association. It must be understood that the World Health Organization is a part of the UN and is an organization of the public health agencies of the nations of the world. The World Medical Association, on the other hand, is an organization of the medical associations of the various countries of the world, and includes representatives of these associations. Therefore, the WHO is a governmental body interested in the health of the world however accomplished. The WMA is entirely in sympathy with the aims of the WHO and cooperates with it in every possible manner, but it is primarily interested in improvement of the public health of the world through improvement in such things as better medical facilities, more and better trained doctors, improvement in types of therapy, medical supplies, and the like.

Since the WMA is not supported by government funds as is the WHO, it must be supported by private funds. These funds come from membership dues of various classifications, and from donations from any source. At the present time there are forty nations whose medical associations are members. Memberships are also open to individuals, and at the present time a number of doctors in this country are paying dues. Pharmaceutical manufacturers also are members of the Association.

Steps are being taken to increase the membership among the medical profession, and Mr. Bobst feels that if the manufacturers become familiar with the Association and its aims and accomplishments, they also will join in the effort. Mr. Bobst feels that the close relationship which now exists between the medical profession and the pharmaceutical manufacturers in this country is something that has been brought about only through years of effort, and that this should be fostered in every way possible. This cooperation has been largely responsible for the rapid strides being made in pharmaceutical therapeutics, and furthermore it is something that is very largely responsible for keeping the older doctors alert to the latest developments in therapy. Also it should be realized that without this close cooperation, proper administration of the "new drug" provisions of the Food, Drug, and Cosmetic Act would be virtually impossible.

It is Mr. Bobst's thought that through the WMA the seeds of this close alliance will be carried to other nations of the world and that in time they will bring about in other countries this most desirable condition.

Accomplishments of the WMA are given as: National medical associations of forty countries now in one

organization; adoption of a modified Hippocratic oath already approved by several organizations; investigation of medical education in 26 countries; investigation of Social Security as it affects medical practice in 24 countries; investigation of cult practice in 24 countries; investigation of medical advertising in 23 countries; investigation of postgraduate medical education in 32 countries (completed and about to be printed); investigation of the status of the medical profession and medical manpower in 23 countries; quarterly publication in three languages (English, French and Spanish) of the Bulletin of the World Medical Association, with Dr. Morris Fishbein as editor-in-chief; arrangements for medical contacts by physicians traveling in foreign countries; arranging lectures by physicians traveling in foreign countries.

Studies in progress by the WMA are: Investigation of hospital facilities in the various countries; investigation of certain pharmaceutical problems in the various countries; continuing the investigations listed in the preceding paragraph.

Dr. Louis H. Bauer, chairman of the Board of Trustees of the American Medical Association, is secretary-general of the WMA, and the address of the Association is 2 East 103 St., New York 29.

An Ammoniated Dentifrice Here to Stay

A LITTLE more than a year ago—in our June 1949 issue—we commented on the ammoniated dentifrice scramble in which practically all leading dentifrice manufacturers were then engaged. We quote from these remarks:

"Manufacturers well know that in a situation in which products are successfully launched on the basis of claims which may later be disproven, one or more of the products might carve out a nice slice of the market for itself and maintain this poistion even though the claims which made it possible are long since discontinued. Flavor, after-taste, and a feeling of cleanliness after use, are the things which sell dentifrices. We have heard this preference expressed regarding one of the new ammoniated powders. Several people have told us that this certain ammoniated powder leaves a more pleasant taste in the mouth than any other product they have ever used. They also said that it gave them a feeling of mouth cleanliness that lasted for many hours during the day."

While the claims for ammoniated preparations have neither been proven nor disproven as yet, the fact that dental caries can be greatly reduced in incidence by cleansing of the teeth with a non-ammoniated dentifrice immediately after eating has been definitely proven by Colgate.

However, the point we wish to make is that a manufacturer has definitely entered the dentifrice market and has "carved out a nice slice of the market" for himself as a result of claims made for ammoniated dentifrices. This is the Block Drug Company—a firm which never before had a dentifrice. Their product is the one with the pleasant taste and after-effect we referred to a year ago in the quotation above. Now, of course they are also marketing a tooth paste.

Block did not depend upon the work of the University of Illinois, but had independent research conducted here in the East. Their formula was radically different than the others. They had no other dentifrices of their own to worry about, so they could drive hard on the product they were introducing. However, to realize how well they have succeeded, one has only to read their announcement that Block Drug Company have recently signed new advertising totaling more than a million dollars to promote Amm-i-dent tooth paste and powder.

F.T.C. and Antihistamines

THE F. T. C. is settling the cases which it brought against the manufacturers of antihistaminics who have been advertising these products for use in cases of the common cold. The essence of the stipulations seems to be that the manufacturers cannot say that their preparations cure the common cold, stop the common cold, abort the common cold, and similar statements. However, the manufacturers are perfectly within their rights in saying that antihistaminics stop the *symptoms* of the common cold, abort the *symptoms* of the common cold, and the like. Therefore, it would seem that the manufacturers can go right on advertising these products for use in the treatment of cold so long as they confine their claims to the *symptoms* of colds and not to the colds themselves.

In fact the Anahist Co. states that under the stipulation they do not have to change their advertising at all. Stanely S. Lasdon, executive vice-president of Anahist said:

"Under the agreement signed with the F. T. C., the basic facts we have placed before the public concerning the effectiveness and safety of Anahist stand undisputed. The agreement is consistent with the carefully controlled experiments that preceded the launching of Anahist last Fall. Since that time over 12,000,000 people have used this product and have acclaimed it the first really effective treatment for the symptoms of the common cold. The stipulations are also in keeping with the original findings of the Food and Drug Administration that Anahist is entirely safe when taken as directed."

Mr. Lasdon said that the evidence which the Commission assessed in the course of its investigation continued to pile up even while the hearings were in progress. "Just last week," said Mr. Lasdon on the day the stipulation was signed, "a United States public health doctor reported that he found an antihistamine 100 per cent effective in treating cold symptoms. That makes eleven studies that have been published on these drugs, comprising over 10,000 test cases in which antihistamines proved from 80 to 100 per cent effective. One of these, a clinical study in which Anahist was used with over 3,500 industrial workers, has shown in preliminary tabulations an 83 per cent effectiveness. Other studies were completed this Winter and are now awaiting publication in the medical journals. Meanwhile, a survey just published reports that 73.59 per cent of United States doctors are prescribing antihistamines for the common cold."

Chain Drug Association Gives to Fair Trade

THE National Association of Chain Drug Stores has voted a contribution of $10,000 to support the program of the Bureau of Education on Fair Trade through June 1951, in order to "develop public support for voluntary fair trade laws." How times have changed since the fight for the Capper-Kelly Bill to control the price-cutting activities of the chain stores. Remember when the fight for the Fair Trade laws was a fight to protect the independent retail druggists against these terrible monsters? We recall asking the question, why do independent retailers believe that fixed prices will thwart the chains and make them less prosperous when

such laws will force them to make a profit on every nationally advertised item that they sell, and at the same time assure them of profitable price levels for their private brands. Well the Fair Trade laws have apparently worked to the satisfaction of everyone immediately concerned since the independent retailers, the chain store retailers, the wholesalers, and the manufacturers are all willing to spend money for the protection of these laws.

What Could Be the Case

THE Dow Chemical Company President Leland I. Doan, speaking before the Bay City Chamber of Commerce some while ago, delivered an address entitled Twelve O'clock Noon," stated:

"I wonder, for example, if our grandchildren, taking a federally prescribed course of education, will one day read in their history books something like this:

"The year 1950, to all intents and purposes, saw the end of free Capitalism in the United States. While another ten years were consumed in bringing about complete national control of all business, the victory of the Welfare State was essentially fact by the middle of the century. Clinging to their sentimental notions of private ownership and freedom of endeavor, the owners and managers of business and industry none-theless failed to convince the people of the merit of what they called 'free enterprise' and the elections of 1952 left no doubt that the American people favored the security of State planning and paternalism.

"The victory of the Welfare State did not, of course come about overnight. It was won by successive stages over several decades. The great depression of the thirties and the great war of the forties which followed hastened it by disturbing the normal operation of the old system. This gave early progressive planners an opportunity to educate the populace to accept controls over prices, wages and the purchase of certain commodities, as well as intermittent direct control over certain industries. And with the high wages prevailing in the 40's the people appeared quite willing to turn over much larger portions of their income to the government to be used in providing welfare services, in stimulating food prices through farm subsidies. . . ."

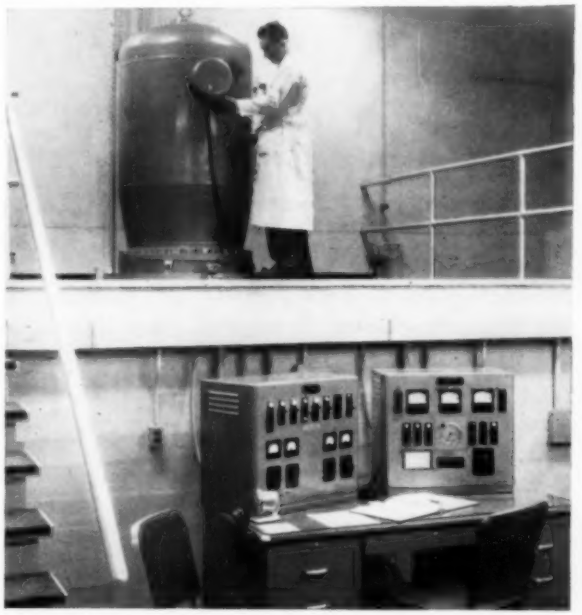
German Products To Be Shown

A DISPLAY of face creams, shaving lotions, shampoos, toothbrushes, razor blades, toilet water, peppermint tablets, aspirin, as well as ammoniated tooth paste and powder, all produced under the trademark "Blend-a-Med by the Blendax Company with factories in Mains, Eppstein, and Horb, all in Western Germany, will be featured at the International Trade Fair in Chicago next month. Blendax, in existence since 1932, has already revived its export trade with most European and Balkan countries.

The Chicago Trade Fair, according to Henri Abt, American Director of the Association for German Export in the U. S., will give American buyers their first opportunity within the U. S. to inspect the new lines with which the manufacturers of Western Germany will bid for attention in the American market. The pharmaceutical and cosmetic industry of Western Germany, seeking to revive its once world renowned export business, has begun volume production. In 1949 it was able to export over $5.5 million worth of pharmaceuticals and about $50,000 worth of quality cosmetics. The Chicago Fair exhibits are the initial concerted effort of manufacturers of Western Germany to reach the American market under strictly private commercial auspices. They have rented almost 20,000 square feet of exhibition space and are planning a substantial advertising campaign in connection with the Fair.

Upjohn Gets Atom Smasher

THE first industrial installation of an electron accelerator—commonly called an atom smasher—has taken place in the research laboratories of the Upjohn Company. The machine is a two-million-volt Van de Graaff generator named after its inventor, M.I.T. Physics Professor Robert Van de Graaff. It is a smaller and more compact model of the machine of tremendous size developed in the thirties. M.I.T. Professor of Electrical Engineering John G. Trump reduced it to its present size of 3,000 pounds, including a 6-foot, 1,500-pound bell of ½ inch thick stainless steel. Six similar machines—three in the U. S. and three in England—have been sold for tumor research, and others have been sold to universities for nuclear research.



The electrons are given tremendous speed through the use of high electric voltage—a 50,000-volt "push" by each of 43 eui-potential planes—and travel at a speed of approximately 175,000 miles per second when they reach the "muzzle" at the bottom. The electrons pass through an evacuated tube and emerge in a concentrated stream which can be direct (1) against a metal target such as gold to produce X-rays, or (2) into drugs and foods, where their energy may be used to kill bacteria. The process may be compared to firing millions of little bullets through the barrel of a gun toward targets, with the push being supplied by electricity rather than by gun powder. Since the high-energy radiations can penetrate thick sections of steel, the Upjohn equipment is enclosed in 5 tons of iron bricks to protect personnel.

The potential usefulness of the machine in sterilization of drugs is the reason for Upjohn's investment. Under present methods of sterilization by heat, by filtration, or by the addition of chemicals, materials

must be sterilized before being placed in bottles, vials, or ampoules which have been previously sterilized. All filling operations must be carried out in aseptic rooms by operators working in masks and exercising time-consuming precautions to avoid the introduction of contaminants. If the electron accelerator works as anticipated, these drugs can be given a final sterilization *after* packaging for greater protection against possible infection. Probably the greatest application lies in the field of thermo-labile drugs, the sterilization of which, particularly in the dry state, may constitute a difficult problem.

It is thought possible that the usefulness of highspeed electrons may go far beyond mere sterilization. Time alone will tell whether or not the application of electrons will increase antibiotic yields through mutation of antibiotic-producing molds. It is even possible that whole new channels of pharmaceutical research will be opened up.

F.T.C. Changes Procedure

THE Federal Trade Commission has changed its administrative procedure to provide that decisions of its trial examiner are to be regarded as Commission decisions, unless appeal is made by the parties involved or the Commission on its own motion dockets the case for review. This change is expected to speed up the work of the Commission. It applies to all formal cases charging violation of the laws administered by the Commission, including the Federal Trade Commission Act, the Clayton Act, Robinson-Patman Act, and others. Before this change, the procedure was for the trial examiner to make "recommended" decisions, which were passed upon by the Commission and were either adopted, rejected, or modified. Under the new procedure, the trial examiner makes an "initial" decision within thirty days after they close a case before them.

The decision becomes the decision of the Commission thirty days after it is served on the parties unless (1) an appeal is filed by the parties; (2) the Commission stays the effective date of the decision; or (3) the Commission on its own initiative issues an order placing the case on the docket for review. The trial examiner's decision must include a statement of (1) findings and conclusions, with reasons or basis therefore, upon all the material issues of fact, law, or discretion presented on the record, and (2) an appropriate order. In the event either the respondent or the counsel supporting the complaint desire to appeal they must file a motion of intention to appeal within ten days after service of the decision. An appeal brief must then be filed within thirty days, and twenty days is given the other side opposing the appeal.

Television Medicine for Latin-America

LATIN-AMERICAN surgeons and physicians are having an opportunity, most of them for the first time, to witness the latest demonstrations of surgical procedures by television during the coming Summer months. This is resulting from a scientific project called "Video Medico" which is being put on in five of the more important countries in Latin America under the sponsorship of E. R. Squibb & Sons International Corporation, working in conjunction with International General Electric.

The joint team is traveling by air, and is carefully timing each stop-over of about ten days to coincide with special meetings of local doctors. For example, "Video Medico" is the major program feature of the Brazilian Congress of Gastroenterology in Sao Paulo (Brazil) and the Congress of the International College of Surgeons at Buenos Aires (Argentina). At these and all demonstrations, leading surgeons in each country visited perform operations, and these are televised before audiences by a crew of General Electric electronic engineers.

During the past three years phenomenal growth has been scored in televising intricate surgical operations as well as clinical treatments before large gatherings of doctors and students in this country. While exact figures are not available, it seems safe to say that last year well over 100,000 doctors viewed hospital procedures via television. This year should record a still higher figure.

Last year, on the occasion of the annual convention of the Canadian Medical Association, Squibb International sponsored the first medical television presentations ever made in Canada. Though the CMA expected only 500 doctors to trek to the small city of Saskatoon, Saskatchewan, in the heart of the prairie country, 1,200 registered and saw a variety of surgical and clinical procedures via television.

Though the Canadian demonsration entailed a variety of technical problems, the Latin-American project is vastly more complicated. Over 9,000 pounds of G. E. equipment must be unpacked, set up and then dismantled at each of the five scheduled stops.

The A.M.A. and Cosmetics

THE Committee on Cosmetics of the AMA was represented on the program of the Section on Practical Pharmacy of the recent meeting of the American Pharmaceutical Association by its corresponding secretary Veronica L. Conley. The abstract of her talk says that Mrs. Conley was there to say pharmacists are in a unique position to bring to the attention of their professional contacts the useful potentialities of cosmetics beyond their obvious function as beautifying agents. Then the abstract quotes Mrs. Conley as saying:

"A sphere of mutual interest between the cosmetic industry and the health professions, has fostered the development of specialized cosmetics to meet the patients' needs in certain health problems. For example, the industry has provided a dual purpose foundation lotion which serves as a cosmetic and as a vehicle for medicaments in the treatment of acne. Also available are entire lines of hypo-allergenic cosmetics which are so formulated that allergic and irritant reactions are kept to a minimum.

"Furthermore health workers have long recognized the protective value of cosmetics and cosmetic-like products. Enthusiastic medical support is being given to the proper use of sunscreening preparations and industrial barrier creams whose main functions are protective. Similarly, the important roles of soap substitutes and industrial cleansers in the public health picture are well recongized."

It appears to us as though the AMA Council would like nothing better than to confuse everyone concerning the difference between drugs and cosmetics. If they could succeed in eliminating the line of demarkation between these two types of products, then they would be in a far better position to extend their control of cosmetics in this country.

Arthritic Drugs Rejected

THE reports on the arthritic remedies which were introduced as cheaper and more freely available substitutes for cortisone and ACTH, are now very encouraging to the firms marketing these preparations. In a recent issue of the Journal of the American Medical Association, four doctors reporting from the Veterans Administration Hospital, the New York Hospital, and Cornell University Medical College, New York and Bronx, N. Y., stated:

"Intramuscular injections of pregnenolone or pregnenolone acetate daily or two or three times a week resulted in no improvement in 17 cases of rheumatoid arthritis. One patient with rheumatoid spondylitis improved objectively and subjectively. In 1 patient with rheumatoid spondylitis there was minor subjective improvement at the end of a week's treatment, but this was followed by gradual relapse in the face of continued therapy."

Also in a recent issue of the Lancet a report by three doctors concludes as follows:

"We conclude, therefore, from this limited but intensive experience—and in common with Kellgren (1949), Spies et al. (1949), Hart and Starer (1949), Fletcher et al. (1950), and Currie and Will (1950)—that deoxycortone and ascorbic acid has no immediate measurable or appreciable effect on rheumatoid arthritis beyond that which follows any non-specific injection or treatment, and that it is not in any way comparable to ACTH. While it is a thankless and even dangerous task to try to account for other investigators' results, we might perhaps suggest that the substitution of the drug to be tested in place of preliminary saline injections, unknown to the patient, and if possible also to the nurses, is an essential requirement of a careful study. The path of therapeutic advance is strewn with the bones and the bottles of those who have neglected such precautions."

Reports in the industry are to the effect that sale of these items are tapering off, which would indicate that reports such as above, or similar results as indicated in these reports are having their effect. Therefore, it would appear that thus far no effective substitutes have been uncovered for cortisone and ACTH.

Nutrition Foundation Studies

TWELVE new grants for research in the field of nutrition totaling $78,150, and effective July 1, have been announced by Dr. E. Gifford Upjohn, president of the National Vitamin Foundation. Subjects to be studied are:

Relationship between nutritional factors and antibody production, by Dr. A. E. Axelrod, the Western Pennsylvania Hospital, Pittsburgh, $4,500; need of APF, B_{12}, B_{13} and related factors for growth and of the effect on food utilization, using pigs as the experimental animal, by Dr. R. R. Heinle, Western Reserve University, Cleveland, $6,000; thiamine requirement of breast fed infants, by Dr. L. Emmett Holt, Jr., New York University; B Complex vitamins in human nutrition, with particular reference to niacin, by Dr. M. K. Horwitt, Elgin State Hospital, Ill.; relation of vitamins and hormones to amino acid metabolism, by Dr. W. A. Krehl, Yale University, $1,600; two-year study of the distribution of tocopherols in human tissues and organs during fetal life and early infancy and the implications to dysfunctions of pregnancy and early childhood, by Dr. Karl E. Mason, University of Rochester, N Y., $4,800; vitamin-hormone relationships, using the rat as the experimental animal, by Dr. Elaine P. Ralli, New York University, $3,500; effectiveness of vegetable protein supplemented by vitamin B_{12} for the growth and development of undernourished children, by Dr. Nevin S. Scrimshaw, Institute of Central America and Panama, Guatemala, $8,000; mechanism of action of vitamin analogues on isolated enzymes, by Dr. Thomas P. Singer, Western Reserve University, Cleveland, $5,000; three-year study of the significance of nutrition and nutritional deficiencies in human pregnancy, by Dr. Winslow T. Tompkins, Pennsylvania Hospital, Philadelphia, $22,500; effects of pantothenic acid on acetylation rates in man, with special reference to a possible role in duodenal ulcer, by Dr. Theodore F. Zucker, Columbia University, New York, $4,000.

Delehanty Shifted from Drugs

THOMAS W. DELAHANTY, who has been associated with drug products in the Department of Commerce for about 27 years, has been removed from the drug field and is now head of the General Products Division of the new Office of Industry and Commerce. The former Domestic Drug Division and the Office of International Trade have been consolidated and are headed by a Chemical Division man, Leonard B. Weirich, and assisted by Miss Schutrampf and W. L. Amos. Miss Schutrampf will handle cosmetics, and Mr. Amos essential oils and botanicals. This is all under the Chemical Division Chief C. C. Concannon.

Who's to Abstract Consumer Books?

FROM the Bulletin of the Suffolk County (N. Y.) Medical Society we reprint the following poem by Dr. Joseph H. Werk of Port Jefferson, N. Y. It is entitled "A Doctor's Dilemma.

I

Do you know that
For heterophoralgia
Or myel-neuralgia
There is nothing that is later
Than Hexo-Amino-Beta,
Do you know that?

II

Do you know that
The kinds of ribes or ritamins
Take care of excess vitamins?
If a patient's much too lustful,
This stuff makes him more trustful.
Do you know that?

III

Do you know that
For rural pleurodynia
Or dermatographia linear,
The ester phase of Phenazone
Is best when used with Cortocone.
Do you know that?

IV

Do you know that
In osteo-chondritis
Or mild thrombo-phlebitis,
Strepto-tyro-peni-thricin
Is becoming more enticin,'
Do you know that?

V

Can you guess how I came by this wonderful knowledge
That never was gleaned from the wards or from college?
The Journal of Surgeons, the Clinics of Medicine
And Procedures from Mayo are equally reticen'.
You can't find it either in Endocrinology
Or even the Archives on Symptomatology.
If you look, as I did, at a patient's request,
You'll find all this data in Reader's Digest.

MULTIPLE SEIZURES

THE MYTINGER & CASSELBERRY CASE

*By James B. Goding**

THE Supreme Court has now finally put to rest all doubts concerning the unreviewable right of the Federal Government to institute multiple or plural seizure actions against allegedly misbranded food, drugs, cosmetics, or devices shipped in interstate commerce. This definitive decision was rendered shortly before the Court recessed for the summer, in the case of *Ewing, Federal Security Administrator* vs. *Mytinger & Casselberry, Inc.*

The product involved, called "Nutrilite Food Supplement," is an encapsulated concentrate of alfalfa, watercress, parsley, and synthetic vitamins combined in a package with mineral tablets. Its distributor, Mytinger and Casselberry, Inc., of California, had enjoyed an increasingly huge success in marketing the product through the technique of house to house solicitation by salesmen. The legality of the food supplement was soon questioned by the Food and Drug Administration on the ground that it was misbranded under the Federal Food, Drug, and Cosmetic Act because of claims of therapeutic value, appearing in an accompanying booklet, in a long and highly varied list of conditions. These conditions, recited in the Supreme Court opinion, range from low blood pressure and high blood pressure to hysterical tendency and deafness.

A host of libel for condemnation proceedings were thereupon instituted in various United States District Courts against interstate shipments of the product. Mytinger & Casselbery countered by filing in the United States District Court for the District of Columbia a complaint for injunction seeking to restrain the government officials involved from prosecuting all pending proceedings, except the initial action, and from instituting new actions against further interstate shipments. After some highly technical legal gyrations, the case was assigned to a three-judge statutory court specially convened in the District Court to adjudicate the question whether the institution of the multiple seizure actions violated the due process clause of the Fifth Amendment to the Constitution. It soon became evident that the District Court was very much interested in hearing the merits of the misbranding charges, laid uniformly in the multiple seizure actions, as well as the constitutional question. To prevent this, the Government in an extraordinary move applied to the Supreme Court for the issuance of a writ of prohibition against the lower court. The Government was unsuccessful, and on the trial the District Court was uninhibited in its reception of evidence. Mytinger and Casselberry, Inc. more than won its case before the lower court. An injunction was entered, and in addition the court held that the labeling complained against in the numerous pending seizure actions was not misleading.

On the second, and presumably the last, visit of this case to the Supreme Court and the lower court judgment was reversed. In setting aside the injunction de-

*Mr. Goding recently resigned as Senior Attorney and Hearing Examiner for the United States Food and Drug Administration. He is now engaged in the practice of law in Washington, D. C.

cree the Supreme Court has followed the legislative intent clearly enunciated in the Federal, Food, Drug and Cosmetic Act. The Court also amply demonstrated the constitutional validity of the power to make multiple seizures. The high court's action is no stunning shock to students of food and drug law; the amazing aspect of the case was the District Court's injunction order.

Actually, the Supreme Court has not exposed new administrative vistas heretofore unexplored by the Food and Drug Administration. The function of the Administration in the preliminary process leading to the institution of multiple seizure actions has been exercised for many years. This function, primarily lodged in the Federal Security Administrator and delegated by him to officers of the Food and Drug Administration, is simply a determination of probable cause "from facts found, without hearing, by him or any officer or employee of the Agency that the misbranded article is dangerous to health, or that the labeling of the misbranded article is fraudulent, or would be in a material respect misleading to the injury or damage of the purchaser or consumer."

There is no question but that the judicially unreviewable right of the Government to seize the entire output of a distributor's product placed in the stream of interstate commerce, constitutes a tremendous, and perhaps superficially frightening, power. There are, however, some very practical as well as legal aspects of this authority, a full understanding of which should demonstrate both the logic of the authority, in the scheme of the Act, and how in proper cases its impact can be cushioned and perhaps sharply curtailed.

I
THE LAW

The Federal Food, Drug, and Cosmetic Act is equipped with three types of sanctions for its enforcement: seizure of misbranded or adulterated goods—seeking condemnation thereof, injunction to restrain their distribution, and criminal prosecution to punish the distributor. Of the three, seizure actions obviously are the most direct means of accomplishing the basic purpose of the law, i.e., to prevent the distribution to consumers of food, drugs, cosmetics, and devices which are dangerous to health or which under the terms of the law constitute an economic cheat. A Congressional Committee report made on proposed legislation which became the Federal Food, Drug, and Cosmetic Act contains the following dramatic description: "the seizure section will continue to function as a means of arresting the bullet in flight before it claims its victim."

In the five year period of legislative history preceding the passage of the Act the 73rd, 74th, and 75th Congresses gave extensive consideration to the problem of plural seizures. The law makers knew that this enforcement technique was frequently employed under the original Food and Drugs Act of 1906. They also knew that a United States Court of Appeals had held multiple seizures illegal under the earlier law. The Food and Drugs Act of 1906 had contained no provision authorizing nor even relating to multiple seizure proceedings.

The seizure section of the Federal Food, Drug, and Cosmetic Act expressly limits the institution of multiple seizure actions for alleged misbranding to two classes of circumstances: 1—when the alleged misbranding has been the basis of a prior judgment in favor of the United States; and 2—when the Federal Security Administrator has rendered a determination of probable cause that the allegedly misbranded article is dangerous to health, or that the alleged misbranding is fraudulent or would be materially misleading to the damage of the purchaser. It should be noted that while multiple seizures for alleged adulteration are not specifically authorized the inference, in the context of the law itself, empowering such procedure is overwhelming. Thus, the statute is cast in terms of limitation of authority to institute multiple seizures in cases involving alleged misbranding and, more important, provision is expressly made for consolidation for trial of multiple seizure actions involving the same issues of adulteration as well as misbranding.

The Mytinger & Casselberry case involved the mildest of the three types of determination of probable cause which are listed in the statute. This was that the alleged misbranding would be misleading in a material respect to the injury or damage of purchasers. While no question of danger to public health was involved, the Supreme Court compared the institution of multiple seizure actions on the basis of the administrative determination to the traditional right of government to summarily destroy property without prior notice or hearing, for the protection of public health.

A major contention of Mytinger & Casselberry, enthusiastically received by the District Court, was that the statute does not provide for, nor were they in fact, permitted a hearing on the probable cause question. The Supreme Court rejected this contention principally on the ground that the administrative determination is only a preliminary decision which may or may not lead to the commencement of plural seizure actions. Actually, the Food and Drug Administration has no authority under the law to institute legal proceedings. The Department of Justice, which includes within its jurisdiction all the United States Attorneys, has that function. Consequently, when the administrative determination is rendered and the Food and Drug Administration recommends plural seizures on the basis thereof, its legal power is exhausted. Then, in the

(Continued on page 120)

COSMETIC PRESSURE PACKAGING

THE post-war years have witnessed a revolution in packaging whose full potentialities are just being realized. With the impetus initially provided by the U. S. Department of Agriculture in their constant search for a better method of insect control, the aerosol method of dispensation has been applied to all types of products in every field of packaging.

The aerosol bomb was first used on a large scale for dispensing liquids during World War II. Over 30,000,000 bombs were filled for the Armed Forces to be used mainly in the South Pacific for mosquito control. At the end of the war millions of service men returned to their homes fully cognizant of the aerosol bomb and formed a ready market for the first aerosol insecticide dispenser to be placed upon the civilian market. Reams of newspaper publicity about the new wonder insecticide DDT, also helped to soften the market for the new product.

The first aerosol insecticide to hit the market was what was known as the "high pressure" type. The container consisted of two steel shells brazed together and to which was attached a dispensing valve. The completed and filled container (16 oz.) retailed for $3.98 with refills available for $2.00. This was soon followed by a 15 oz. non-refillable container which retailed for $2.98. In the flush years following the war, sales at the above prices were good; but it was obvious that, as the consumer market tightened, a cheaper unit must be developed to hit the mass market and to fully capitalize on the aerosol principle.

Since the "high pressure" container was governed by ICC regulations, the first step was an amendment to the regulations to permit the use of the "beer can" type of container. Since this amendment forms the basis of today's "pressure package" they are briefly summarized here:

Low Pressure Aerosols—Up to 40 p.s.i. gauge at 70°F. Exempt from specifications if complying to the following:

1. Non-refillable metal containers charged with non-poisonous and non-inflammable compressed gases.
2. Capacity not over 16.6 fl. oz.
3. Pressure not over 40 p.s.i.g. at 70°F.
4. Liquid contents must not completely fill the container at 130°F.
5. Each filled container must be tested at 130°F. before shipment.

With the above as the basis, the "low pressure" aerosol was launched in the Spring of 1948. For the

*Seaboard Packaging Corp., Newark, New Jersey

*By Edward F. Helfer**

balance of the year the insecticide was the only product packed and sales were approximately 7,000,000 units. The industry was furiously at work developing new products utilizing the aerosol principle; however the full effect of this development work was not to be felt until the following year. The year 1949 saw the beginning of the tremendous expansion into new products . . . plastic sprays, paints, moth proofers, and room deodorants began to appear on the market in ever increasing quantities. Industry wide sales increased to approximately 20,000,000 units.

In December 1949 a leading agency made an extensive survey of the aerosol industry. The survey covered both dealers and consumers of self-dispensing products. Of the total dealers interviewed, 67 per cent stock aerosol bombs as compared with 60 per cent a year ago. The department, drug and hardware stores are the important outlets, but distribution in food stores over the past year has increased from 32 per cent to 47 per cent. Eighty-eight per cent of the dealers questioned said, that sales were the same or better than last year. Dealers also reported that consumer objections to self-dispensing products had decreased from the previous year. Eighty-six per cent of the dealers believed that the principle of self-dispensing products is catching on with the public.

The consumer survey showed that insecticidal aerosols still form a high percentage of aerosol sales, but that other products such as moth-proofers, household deodorants, and others are beginning to catch on.

A great many of the people included in this survey stated that they had never purchased an aerosol dispenser. Thus despite the phenomenal increase in sales since the start of the industry, there still remains a great untapped market for aerosol dispensers.

For years those in the aerosol field have eyed the cosmetic industry as a natural outlet for this method of dispensing. Application to the cosmetic industry required two things: namely, development of cosmetic formulations, and a highly styled cosmetic-type aerosol container. Approximately, one year ago the Sun Tube Corp. of Hillside, New Jersey saw the need for such a container and started the intensive development work necessary before production. This container is currently being produced in 2 oz. and 4 oz. sizes and will be produced in a 6 oz. size if the demand developes. It is made of 2S aluminum by the impact extrusion process. The container bottom is concave and ridged for strength, and after filling is double seamed to the body.

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BETTMANN ARCHIVE

MEDICATED

EVER since man learned to bind up his wounds, bandages and dressings have played important parts in the care of open lesions. The primary function of such products is to prevent contamination of the wound and to protect exposed tissues. If, in addition, they can provide substances to the wound to hasten healing, so much the better. This, in short, is the chief advantage of the medicated bandage or dressing.

Europeans make use of a greater variety of medicated bandages and dressings than do Americans. Nonetheless, people in the United States are quite well aware of the potentialities of such products. This is indicated in the popularity of the small individual adhesive bandages with gauze pads impregnated with boric acid, Mercurochrome, tyrothricin and, in previous years, with sulfonamides. The patent literature—often an index of progress—indicates a growing interest in new and improved products of this type.

In addition to the small "first aid" types of bandage, there are the more specialized dressings used by physicians and surgeons for specific conditions. Actually, quite a wide range of products could be made available. Descriptions of the several types of medicated bandages and dressings are given in various texts, reports and especially in manufacturers' literature.

For the sake of convenience, the different types of products can be grouped into five main classes. First are the bandages impregnated with ointment or paste-like materials. In this class belong the tulle gras and the Unna's boot types plus various modifications of these and other kinds of local dressings. In the second class are the products which provide an antibacterial action in addition to a protective effect. This broad category includes products ranging from borated bandages to penicillin-containing gauze dressings.

Hemostatic dressings form the third class. Although products containing styptic agents are the true representatives of this class, it is permissible to include oxidized cellulose and alginate fibers in the category.

In the fourth group are bandages and dressings made with fibers other than those usually employed to make gauze and other wound-protecting fabrics. Here belong the modified and synthetic fibers, such as glass threads, regenerated cellulose strips, and starch sponges, which serve as carriers for various medicaments. Representing a new and interesting approach are the preformed medicated films which comprise the fifth and last category.

Among the oldest and most widely accepted products are those of the petrolatum-gauze type and similar dressings of the tulle gras class. According to McIndoe,[1] tulle gras for use as a dressing for burns was originally a French preparation. It may be made, said he, by impregnating curtain netting (2 mm. mesh) with the following mixture:

Soft paraffin (petrolatum)	**96 Gm.**
Balsam of Peru	**2 Gm.**
Halibut oil	**2 Gm.**

A British modification of this dressing, known commercially as Nonad Tulle, is provided as a sterile gauze dressing impregnated with soft petrolatum containing one per cent each of balsam of Peru and halibut liver oil. The producer states that dressings with a foundation of this material will not adhere to wounds; the open mesh allowing secretions to be absorbed by the outer bandages thus reducing the number of changes required. The dressing is indicated for use on septic wounds, burns, gangrenous sloughs, varicose ulcers, indolent wounds, operation wounds and pruritic or infective eruptions.

The vitamin A and D-containing fish oil is omitted in the impregnating mixture given in the 1949 edition of the British Pharmaceutical Co-dex" (B.P.C.). According to this official publication, the paraffin gauze or tulle gras dressing consists of bleached cotton cloth, cut to required size, packed flat into metal containers, and impregnated with medicated soft paraffin made according to the following formula:

Balsam of Peru	**12.5 Gm.**
Yellow soft paraffin	**1000.0 Gm.**

After impregnating the gauze, the container is closed and submitted to sterilization by heating at 135°C. for 30 minutes.

BANDAGES AND DRESSINGS

By Milton A. Lesser

In discussing the manufacture of such dressings, Hopkins[2] notes that the balsam of Peru is digested for some time with soft paraffin on a water bath. The melted paraffin is then decanted and poured over layers of gauze or cotton net previously packed in tins. Dry heat, he states, is the obvious method of sterilization, but he notes that the work of Savage[3] has shown that sterilization can be carried out by autoclaving. Producers of these dressings suggest their use in the care of cuts, abrasions, burns and scalds and excoriations because of the soothing protection it offers to the injured area. The dressings are also advised for the treatment of sore patches of impetigo, eczemes and similar skin troubles.

Even simpler are the petrolatum gauze dressings which are finding increased use by American physicians where a bland, non-adherent, non-irritating dressing may be required for burns or wounds.[4] It is reported[5] that such dressings, which also find use in many surgical procedures, were developed during the last war at the request of the Surgeon General of the U. S. Army. One leading product of this sort consists of a 3 by 36 inch strip of sterile, fine-mesh absorbent cotton gauze uniformly saturated with sterile petrolatum. The dressing is then accordion-folded and heat-sealed in a moisture-proof, aluminum foil envelope.

Popular both in this country and abroad are bandages treated with Unna's "boot paste" or with modifications of this famous and effective zinc glycerogelatin compound. As pointed out by Smith,[6] this compound is useful in the treatment of obstinate ulcers or eczema of varicose legs and when applied as a paste boot it supplies protection for the lesion and support for the veins. Very important is the fact that it often permits healing of the ulcer while the patient is ambulatory.

According to the B.P.C., such a zinc paste bandage consists of white, open-wove cotton gauze impregnated with a paste containing zinc oxide and glycerine, as in the following mixture:

Zinc oxide	**17.0 Gm.**
Glycerine	**25.0 Gm.**
Sterilized refined glue	**6.5 Gm.**
Acacia	**8.5 Gm.**
Benzoic acid	**0.5 Gm.**
Water to make	**100.0 Gm.**

A typical American product (Una-gel) of this type consists of a gauze bandage impregnated with zinc oxide, glycerine and gelatin; yielding an efficacious and time-saving Unna's type dressing. In its acceptance of another product (Medicopaste Bandage) of this class, the council on Physical Therapy of the A.M.A.[7] described it as an adhesive gauze bandage impregnated with zinc oxide paste (Unna's boot). The active ingredients include zinc oxide, glycerine and 0.1 per cent each of phenol and formaldehyde as preservatives. The melting point of the medicinal paste is lowered so that it stays liquid at room temperature and needs no heating, as is the case with the regular paste. Hence their bandage, which is white in color, may be applied in the form of an Unna boot without heating or painting. The bandage proper is wrapped in four layers of waxed paper and placed in an air-tight container.

The principal indications for a bandage of this kind include vascular inflamed varicose veins, thrombophlebitis, ulcers, swellings, post fractures, foot ailments and eczemas. Other possibilities of use include sprains, prophylactic dressings in threatened thrombophlebitis, dressings in other parts of the body and in unpadded plaster-of-Paris casts as an intermediate layer between the skin and the cast. In such indications the bandage provides a firm, elastic, resilient support.

Since bandages of this type are extensively used for ambulatory cases, one manufacturer has taken a psychological factor into account by providing his product with a natural flesh color. This bandage (Dome Paste Bandage) is modified in that it contains calamine in addition to the zinc oxide, glycerine and gelatin. As shown in Cooper's[8] report, the use of this modified bandage is an integral part of an effective regimen for treating varicose ulcers.

Various other combinations may be used or adjunct materials may be added to the bases used for making other medicated bandages of the zinc paste type. Thus the Primer Bandage, for use in the treatment of varicosities, leg ulcers and related conditions, employs a mixture of glycerine, gum acacia, zinc oxide, boric acid and distilled water. In a foreign, patented process[9] for making zinc glycerogelatin bandages, it is suggested that magnesium chloride be added to a mixture of zinc oxide, gelatin, water and glycerine. The final product is then painted out a suitable support.

Glycerine-gelatin combinations also form bases for other types of medicated bandages. One such product, developed and sold in England and now being tested in American hospitals, is known as Cimlac Gauze. This is a bland, non-greasy, non-adherent wound dressing made by treating gauze with a preparation consisting of 0.1 per cent each of 5-amino-acridine and hexylresorcinol in a sterilized glycerine-gelatin base. In England it is used as a general dressing for burns, wounds, boils, carbuncles, ulcers, bed sores, as a post-operative dressings following rectal surgery and in preparing tissue surfaces for skin grafts. Preliminary studies in a New York hospital indicate that Cimlac is a useful dressing for chronic ulcers of various types.

Other bandages made with ointments or similar materials have been developed during the last few years. In one process[10] gauze is coated with a non-tacky, water-dispersible gel or base such as the following:

Hydroxyethyl cellulose	**150 parts**
Triethylene glycol	**900 "**
Mineral oil	**75 "**
Oil-free corn oil phosphatides	**6 "**

This serves as a vehicle for various compatible medicaments. Thus an iodized bandage can be made by applying the following mixture to gauze:

Base (as given above)	**956 parts**
Iodine crystals	**20 "**
Soduim iodide	**24 "**

In another method,[11] an adhesive bandage is provided with an ointment-impregnated pad; the pad being protected by a suitable cover, such as wax paper or the like. Almost any kind of ointment may be used including white petrolatum, boric acid, sulfa combination, scarlet red, mercurous chloride, Whitfield's, ammoniated mercury, zinc oxide or coal tar ointment. Such a dressing is said to be particularly effective in the care of minor wounds to speed tissue repair and minimize scar formation.

Representing a modification of the familiar ever-ready iodine swabs and ammonia inhalants for first-aid kits are the handy dressings developed by Roberts.[12] These consist essentially of small friable containers of thin glass, plastic or gelatin surrounded or covered by pads of absorbent material. The container is broken just prior to use to permit its medicating liquid contents to escape and saturate the pad, which is then applied to the lesion. If desired the container can be provided with small projections that are easily broken to allow the medicament to flow from the container. The dressings can be made in sheets or in individual strips with adhesive backs to secure the bandage.

The idea of incorporating an antiseptic in a bandage or wound dressing is an old one. In the main, all that is required is to dip gauze into a suitable solution of the antibacterial substance, press out the excess fluid and dry. It was assumed, of course, that the moisture present in a wound would again bring the active agent into solution so that it could exert its beneficial effects on the wound. This, unfortunately, is not always true.

Boric acid has long been a favorite agent for making bandages and dressings of this second class. Individual adhesive bandages with borated gauze pads have been popular first-aid items. Standards and other general information on boric acid gauze, boric acid absorbent cotton and boric acid lint are given in the B.P.C. Essentially, the process consists of immersing the fibrous material in a hot, aqueous solution of boric acid tinted pink with a suitable dye, removing the material from the solution and pressing sufficiently to produce a product which, when dried, complies with the official standard.

An interesting variation is a process[13] which utilizes a fibrous form of boric oxide made from molten boric acid by a method analagous to that used in making glass wool. To make the antiseptic bandage, these boric oxide fibers are mixed with absorbent cotton fibers. On contact with body or other fluids the boric oxide fibers are quickly converted to boric acid. If desired, other medicaments like silver oxide or zinc oxide can be introduced into the boric acid melt just before the fibers are formed.

As might well be expected, various attempts have been made to produce antiseptic bandages containing utilizable iodine. Although methods are available[14] for the iodization of fabrics with iodine solutions, it is much more common to use iodoform as the impregnant. In discussing the preparation of iodoform gauze, one European worker[15] suggests that, for impregnating the gauze, the iodoform is best dissolved in acetone. He notes that the addition of a little paraffin oil or rosin makes the iodoform adhere better.

In the method outlined in the B.P.C., the dressing is prepared by immersing absorbent gauze under pressure in a solution of iodoform in solvent ether, removing the material when all the solution has been absorbed and allowing the solvent to evaporate. The standard gauze contains 4 to 6 per cent of iodoform. Gauzes containing about 10 per cent of iodoform, either alone or with glycerine, are also prepared. Using a similar method, it is possible to prepare iodoform ribbon gauzes ½ to 2 inches wide. In this connection it may be noted that a leading American manufacturer of bandages and dressings produces a uterine gauze packing strip containing 5 per cent of iodoform. This is especially indicated for packing the uterus in cases of placenta praevia and postpartum hemorrhage.

Antibacterial salts of the heavy metals find rather frequent use in the preparation of antiseptic bandages. Long familiar to the public are the individual adhesive bandages with pads impregnated with merbromin (eg Mercurochrome). Not so well-known, however, are dressings utilizing silver and silver compounds. Thus, in his recent discussion of surgical dressings, Karafin[4] mentions the use of silver coated adhesive for treating varicose ulcers.

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AUTOMATIC DISTRIBUTION

By Frazer V. Sinclair

THERE's a question to be answered by marketing experience in the next ten years. That is, will automatic machine selling largely replace super-market, self-service selling for many staple, low priced, utility products?

Just as self-service appears to be a technological advance in distribution, automatic dispensing carries this technology one step further. Self-service in the retail store still waits for the customer to come to the store. It costs money to build and hold the traffic self-service needs to be really profitable; it still means some customer inconvenience, i.e., the customers must take time to go out of their way to visit the store. Automatic dispensing machines, on the other hand, go to the customer—they are there, waiting, in places of busy traffic where the customers congregate for business or pleasure.

"We're at the threshold of a golden age in this vending machine business," said a leader in this industry recently. "There isn't a product that can't be sold through a vender—any package, any size, any shape, any price. The trouble is finding prime traffic centers."

So far as big business goes, the industry has certainly stepped over this threshold. Now well over a billion dollars a year, the ratio of growth over the last few years, makes the kind of sales chart that few industries can equal. Sales of the A. B. C. Vending Corp. in 1949 were $36,705,000 and are expected to reach $40,000,000 in 1950 according to Charles L. O'Reilly, president. This company now markets an average of 75 items, including soft drinks and candy, in 28 states. The Canteen Co. grossed $35,000,000 last year.

While the only fast moving products in machine vending at present are candy, gum, nuts, cigarettes and beverages, new products are under constant test. There seems to be only two limits to machine vending—finding the right location and consumer approval, of the product via the machine. As an indication of vending versatility, products on trial are milk, frankfurters and hot rolls, sandwiches, ice cream cones, a wide variety of services, such as photo machines, tickets, voice recorders, etc., and a variety of merchandise products, such as aspirin, books, crackers, hosiery, handkerchiefs, towels, razor blades, tooth paste, etc.

Filene's new automatic machine dispensing store in the new "million dollar" Grayhound Terminal in Boston is generally recognized in retail and distribution circles as revolutionary. The first few days after opening are said to have pulled almost as many interested business observers as customers.

Filene's new automatic, retail extension is an admitted experiment. It is an experiment in a form of self-service for a department store. It is also an experiment in finding if it pays to go where consumers must normally congregate anyway and to see if and what they will buy on the run.

This new automatic store is called U-Serv-U. Each machine is illuminated for display and operational purposes. One attendant makes change and keeps the machine filled. Officials of Federated Department Stores, of which Filene's is a member, say that a transaction—wrapped merchandise delivered—can be completed in two seconds. Products on sale include women's panties, pearl earrings, nylons, ladies' gloves, men's hose, men's T shirts, dolls, baby pants, cards, soap, men's ties, etc.—in all, twenty items.

If, as automatic machine men say, the primary problem of vending is finding

(*Continued on page 132*)

By Harry Hilfer

COLD WEATHER PREPARATIONS

IN AN analysis of functions which protective preparations, used in wintry weather, must possess we must first consider the factors associated with cold weather which should be counter balanced. Exposure to winter temperatures in areas of low humidity is not nearly as damaging as the combination of high humidities and low temperatures. A desirable preparation should therefore serve as a protective agency against moisture primarily. Since a certain amount of chapping is to be expected, in spite of all precautionary efforts, an emolliency should be imparted to these preparations to aid in the maintaining of smooth-feeling skin. Any of the cold weather preparations should therefore be possessed of these two factors.

One of the largest classifications of cold weather preparations are directed towards the care of the lips. Since they are prone to a greater degree of moistening than are other exposed parts of the body, they are more susceptible to chapping than are the hands or the rest of the face. A water repellent film seems to be the obvious method of keeping moisture from being in contact with the lips and that is the basis of most preparations serving as anti-chapping preparations. The most popular form seems to be a mixture of oils

and water, moulded into a stick form. There are a large number of raw materials available which could be incorporated into such a preparation, making it possible to obtain any desirable consistency and an applied film of any desired thickness. Generally speaking, the lower the viscosity of the oils used, the thinner would be the applied film. This generality, however, is greatly affected by the character of the waxes used to stiffen them to their proper consistency. Ozokerite for example would be inclined toward forming a thicker film than would the more crystalline waxes, such as paraffin or spermaceti, while beeswax would be somewhere in between. Mineral oils of varying viscosities may be used in preparations of this type as may be any of the fixed oils. Actually, some of the hydrogenated oils available commercially behave rather well in preparations of this type, since they may be hydrogenated to any desired melting point. Though the oil does not necessarily consist of any single entity, the components present in it are better miscible with each other over a wide temperature range, than are two substances which are miscible at an elevated temperature, but subject to separation at lower temperatures.

The ideal anti-chapping preparation seems to be one with an actual liquefying point somewhat higher than human skin temperatures, but of a soft consistency. One of the things we quickly learn, but not generally understood, is the fact that hardness is not necessarily a function of high melting point. It is, therefore, easily possible to formulate a relatively soft and easily appliable ointment base, with a relatively high liquefying point. Such a formulation is probably the most desirable, since there is no necessity for an imparting of the gloss characteristic of lipsticks. There are, as stated above, a large range of available materials which are water repellent and which may be used in the formulation of such a product.

Another method which may be used as a water repellent agency is by the application of a lacquer-like film to the lips. Ethyl cellulose solutions in alcohol for example is a case in point. The use of a solvent such as alcohol, however, has one great deficiency which keeps it from becoming popular and that is its tendency to precipitate proteins if present in high concentrations. If a suitable water insoluble lacquer forming material can be deposited from a 50-50 water alcohol mixture, the deposition of a much more permanent film could be effected.

The use of hand lotions had been widely recommended in cold weather safeguards. They depend on a somewhat different function, however, for their efficacy in a good number of cases. This is also true of hand creams which have much the same characteristics. Since many popular preparations in this category have departed from the older more classical formulae, descriptions of both will be given. The oldest type of hand lotion recommended for use in cold weather is the classic glycerine and rose water preparation. Glycerine in this instance becomes the protective film former. Since it is a humectant, it could hardly be expected that it would form a water repellent film. Its presence, however, will prevent ice crystals from forming and roughening the skin. In the better known hand lotions, glycerine is still being used, but in conjunction with other substances having water repellent characteristics. In this fashion a film may be deposited which has the desirable functions of both and with a greatly enhanced smoothness of "feel" resulting. The hand cream has followed this same evolution as is characterized by the well-known stearic acid soap formulation containing relatively large amounts of glycerol or other humectant.

There has come into prominence, relatively recently, a newer type in which mineral oil or other oils are being used in conjunction with a soap emulsifier so that the film may consist entirely of a water repellent agency. The biggest single factor probably responsible for its evolution has been the increasingly large number of emulsifiers which have become available. Triethanolamine and other amines having mild alkaline characteristics and capable of forming soft soaps may be included in this list since their soaps may be considered as new emulsifiers. By their use broader formulations are possible now than were previously and though it is difficult to imagine it offhand, it is now possible to form a relatively stable emulsion containing enough of a water repellent to form after application an essentially water-repellent film. This form now approaches the well-known anti-chapping preparations used for the lips.

The author does not recommend one type against another, since their popularity is about equal. Their development was stated in a chronological order but their feasibility as cold weather agencies, as far as the author knows, has not been tested over a long enough period of time to indicate which is the more effective type. Such tests are rather difficult to perform with any degree of accuracy because of the variables introduced by the individual eccentricities of any group of human subjects.

PROPRIETARY ASSOCIATION M

Retiring president Walter R. Beardsley congratulating new president Lupton Patten at the Associations' sixty-eighth annual convention at the Greenbrier Hotel, White Sulfur Springs. Mr. Beardsley is president of Miles Laboratories and Mr. Patten is president of the Chattanooga Medicine Co.

● ● ● "The real magnitude of home magnitude of home medication today has been obscured by the fact that statistics of the sale of medicines direct to the people for their home use and without doctors' prescriptions have never been added together and looked at as one total," Retiring President Walter R. Beardsley, president of Miles Laboratories, told the members of the Proprietary Association at their recent annual meeting. "The Proprietary Association with its 146 active members only represents a part of those products going to the consumers through advertising. There is a large and unknown volume of drugs and branded products being sold to consumers by companies and individuals who are not members of the Proprietary Association. A few of these companies are of large financial size but most are small.

"The part of the home medication business which I want to treat somewhat more fully are those over-the-counter items of the drug manufacturers who spend most of their promotion money on the medical profession. Due to the objection of some of the medical profession to advertising and to self-medication, these companies who derive their profits from the doctors are naturally reluctant to speak loudly about their over-the-counter items. Being president of the Proprietary Association and president of the Miles Laboratories, I have no such reluctance. Our company is in competition with long lists of products put out by the ethical companies and heavily promoted by window displays, counter displays and other point of sale promotion reinforced with armies of detail men. Anyone in the proprietary business knows that this is rugged competition. Some of the largest selling items in the laxative field, in the vitamin field, in the pain-relieving field, in the field of acid indigestion, to mention a few, are put out by ethical houses. These products are purchased by the consumer without prescriptions, have complete labels and directions and can only be classified as home medication. Their first sale may come by a doctor's recommendation or passing out of a sample in a doctor's office. The momentum carries from there by neighbors' recommendations, word of mouth, point of sale promotion, write-ups in general circulation magazines by public relations experts, and every other known method of advertising with the one exception of radio, national magazines and newspapers. These over-the-counter items are a very important part of the total business of even the largest ethical companies. Probably only their most confidential records could definitely show how important.

"I am not trying to criticize the over-the-counter business. It is good, healthy competition and most of the products have real merit. I am merely trying to point out that this very large drug business must be considered as home medication and self-medication.

ON MEETING

When we add up the sales of members of the Proprietary Association, the large volume of sales of the non-members of the Proprietary Association, the over-the-counter sales of the ethical companies, we arrive at an extremely impressive total. Home medication and self-medication is important.

"Why is home medication so important? I have endeavored to find some evidence along this line and have searched the records of market research companies, public opinion poll organizations, together with two pieces of original research that was done for our company. Practically all of these add up to very sketchy evidence but they do point to certain facts which seem to tie in fairly well with what one would expect. These figures, of course, apply only to the United States and to only a relatively small number of families within the United States and all of the surveys have been made within the last ten years.

"In one survey made on 1200 families in Pennsylvania in 1947, 60 per cent said that they used home remedies before calling a physician although 87 per cent said that they had a family physician. In another survey made in 1944 the use of home remedies ranged from 55 per cent for digestive disturbances, 60 per cent for colds, 68 per cent for headaches, 77 per cent for first aid. Laxatives showed up for another high percentage. In the Pennsylvania survey 10 per cent said that they could not affod a doctor and another 7½ per cent said they were discouraged with their doctors. However, the large majority seemed to view home medication as a first line of defense and particularly applicable to the numerous minor ailments to which mankind is subject. The doctors were reserved for the more serious and advanced stages of illnesses.

"From a psychological standpoint, most Americans seem to like to take care of themselves, their relatives and their friends. This is the basic appeal of home medication. They are intensely interested in health, as evidenced by the fact that every newspaper and general circulation magazine has a science editor and schedules regular articles on new treatments and new products in medicine. In the Pennsylvania survey, as a source of health information, people reported that 27½ per cent of them got their information by word of mouth, another 30 per cent from newspapers and magazines, and 34 per cent from their doctors. There is no doubt that the American people today are extremely health conscious and that for their more common, easily diagnosed and less serous ailments they depend heavily upon their home medicine chests.

"Just how strong is this tendency of the people to depend upon home medication for their less serious ailments? Is it economic in its origin? Do they do it to save money or is it a self-reliant effort to take care of themselves? A partial answer might be the trend of sales for proprietaries in those countries which have either wholly or partially tried socialized medicine and free medicine. England has now had free medicine since July 1, 1948, nearly two years. Free prescriptions under the National health service and dispensed by the retail chemists have nearly doubled in volume. One would expect that we would witness a corresponding reduction in the sale of over-the-counter proprietaries for home medication in a country, where the economic level is much lower than the United States and where one may get a free prescription from one's panel doctor. The accurate records of the Nielsen Company show that this has *not* happened. The sale of proprietaries in England are rolling merrily along and actually have increased a small percentage. This result, of course, is not conclusive. National free medicine in England is less than two years old and many other economic influences were at work to affect the figures. In any case, the report does show that home medication has a remarkable vitality. People in England still seem willing to pay money for their old proven products and to continue to dose themselves at home for minor common ailments. I quote one significant sentence from the Nielsen Company, 'While the freedom of research, development, and marketing of proprietaries is given to the manufacturers and their activities are not curtailed by government legislation, the evidence at present available would suggest that a National Health Service did not affect the sales of such products.'

"Dr. Cullen has made some inquiries from New Zealand where free medicine has been in effect for nearly ten years. His query was 'What are the effects on the sale of proprietary products that are advertised to the public, to be used in self-medication?' The answer that he received is as follows: 'The introduction of the New Zealand scheme does not seem to have badly affected the sale of proprietary products advertised to the public. On the whole, the sales of nationally advertised proprietaries in New Zealand are reasonably good after six or so years of free medicine.'

(*Continued on page 133*)

DEVERE BAKER

OLFACTORY PREFERENCE

*By Dean Foster Ph.D.**

JOSEPH E. SEAGRAM & SONS, INC.

IN ALL the senses, with the possible exception of vision, there are qualities which are intrinscially unpleasant. Certain sounds are so intensely displeasing that they "set our teeth on edge." We dislike the "feeling" of certain soft slick surfaces even before we have learned that others share our aversion. With odors the effect is perhaps more striking than it is with the other senses. Children and adults typically avoid skunk, fecal, and rotten odors, to name but a few. On the other hand, they seek out floral, fruity, and spicy type odors. There are some exceptions resulting from experience but in general the preference seems to be consistent from one race or culture to another. The influence of training then can be measured in its own right starting from a common, relatively stable baseline.

As with the sense of taste, mixtures of different qualities will greatly alter preferential response. A sweet taste mixed with an unpleasant bitter may produce a pleasant tasting compound. Similarly, unpleasant burnt

*Delivered before the Scientific Section, Toilet Goods Association.

combined with fruity qualities in the right proportions prove highly acceptable; however, we can be certain that sensitivity may alter the desirability of the mixture. For example, a colleague, upon giving up chain pipe smoking, became suddenly hypersensitive on two different occasions. During these attacks he was at once embarrassed and chagrined by the malodorous properties of the people entering his office. He was so sensitive to ordinary tap water that he changed to using distilled water. Finally, after weeks of discomfort he was forced to resume pipe smoking in order to regain his normal insensitivity.

The Problem: The statement is often advanced that the olfactory sense is feeble in infants and children[1] and that women are typically more sensitive to odors than men,[2] and for that reason reject odors that men consider pleasant. Such statements are for the most part undocumented and cannot be accepted at face value. If such speculation is well founded, one might expect that children would accept, as pleasant, smells that adults would reject, and that men and women might disagree concerning the pleasantness of an odor. The present study was motivated by three considerations: first, to investigate the relationship between age, sex, sensitivity and preferences for odors; second, to determine whether or not an odor can be found which would be classed as pleasant by all observers; and finally, to locate for additional study as many atypical subjects as possible.[3,4]

Methods: At best it is difficult to distinguish the effects of maturation and learning in an individual. One may learn to like certain cheeses or perfumes, beers or other odorous products as a result of exposure to them. We may assume, however, that if we study a sample of the population that all persons will not have developed acceptance or rejection of the same odors. One experimental recourse, then, is to select large numbers of observers to avoid the biasing effects of association. Another possibility is the selection of stimuli which are unfamiliar to the subjects involved. For this reason a large percentage of the 25 odors chosen were judged, in pretest, to be new odors. At the same time, it was necessary to select odors with minimum trigeminal properties, i.e. minimum pain, cooling, warm, or touch properties. The odor selection, then, consisted of a pretest of pleasantness, familiarity, and of psychological odor purity employing adult subjects.

Observers: To trace the development of odor preference it was necessary to select several age groups. The age groups were chosen at four-year intervals, including nursery school, third grade, seventh grade, and college. An old adult group was added to note any change with advanced years. These five age groups were arbitrarily selected on the assumption that they were sufficiently disparate in age to avoid overlapping, yet proximate enough to indicate any large change that might obtain. Only recently, we have extended these experiments to include infants but methodological problems of interpretation prevent the publishing of the data at this time.

Procedure: Some of the present experiments were conducted at Cornell University, others at Joseph E. Seagram and Sons, Louisville, Kentucky. The pre-school children of the Cornell nursery school were led singly to their own familiar testing room in the school. The experimenter (E) instructed them to indicate as each odor was presented, whether the smell was pleasant (good) or unpleasant (bad). The children had minimum difficulty in grasping the object of the "game" and participated willingly. Although they often voluntarily reported on the identification of the familiar odors, no account of identification was asked of them. An assistant recorded the names, ages, sex and preferential responses of each child, while E instructed and presented in random order the series of stimuli. The odorants were presented in opaque, two dram vials held approximately an inch from the nostrils. Facial expression and avoidance responses might have been sufficient indication without the verbalization, but all subjects were encouraged to classify their responses. The series of fifteen was given at the rate of two odors a minute. With the exception of spearmint, and amyl acetate, the odors were nearly pure.

As with the pre-school children, the third, and seventh grade pupils were studied in a private well-ventilated room. For the college age adults, a recitation classroom was employed, and as many as twenty observers participated at a time. The entire group was carefully instructed, asked to refrain from commenting, and was cautioned in the careful handling of the odorants. Each adult observer recorded his own responses on standard data sheets with a "plus" (+) for pleasant, and a "minus" (–) for unpleasant. Odors considered neither pleasant nor unpleasant were rated 0. A sample of thirty adult observers studied singly demonstrated the validity of the group method, i.e. the results of the two methods were very similar. Another test was conducted in which fifty adult subjects studied the odors without specific instructions in the method of sniffing. A second group of the same size was carefully instructed in a technique designed to minimize fatigue: they were instructed to hold the breath and wave the vial lightly under the nose, allowing the vapors to diffuse into the nostrils. The two groups yielded nearly identical preferences, but the instruction was continued in later studies as logically defensible.

With the children, the mechanical problems were greatly reduced since the experimenter handled all vials. After each series, the external portions of the vials and the screw-caps were scrubbed with ethyl alcohol and water to remove any contamination.

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TEST MARKETING A NEW PRODUCT*

By Richard L. Hull†

WHAT I have to say will center around three general questions. They are:

1. Which new products do we test? How do we decide whether to introduce a product on a nation-wide basis or to try it out first in a limited test market?

2. Having decided that a product will be tried out first in a test market, how do we go about it? What are the mechanics?

3. Having conducted our test, how do we interpret the results?

COMING back to the first question "Which new products do we test?" it is important to understand clearly that our reason for testing any product is to determine whether it will sell in satisfactory volume

Marketing tests are not to be regarded as extended clinical trials. We do not use marketing tests to learn more about the therapeutic action of a product, or to determine what the proper dosage should be, and certainly not as a check on the laboratory's toxicity data. If this is not drawing too fine a distinction we are testing the marketability of the product—not the product itself. We are testing its acceptance, not its action. And we test only when there is a reasonable doubt as to marketability or acceptance.

When our management is confident that a new product will sell in satisfactory volume, we move directly from the development stage to the national market without an intermediate test. In the past few years most of our new products have been of this type. They have been products in which management had enough confidence to take the plunge. Test marketing is reserved for those cases where we want to stick one foot in the water first. Maybe your company is infallible, ours isn't. We have made some bad guesses. But our batting average on products where we did take the plunge direct into national marketing has been quite high. One reason for this is that testing offers a way of trying out the water when we are not sure.

I am not prepared to say just how confident you must be that a new product will sell before you take the plunge. Certainly, if you feel a product has only a 50-50 or 60-40 chance of success you should test it first. If you have no doubts at all about it, you certainly should not waste your time and effort and expense in a test. But where is the breaking point? I have said that as SKF we test only where there is "a reasonable doubt." You will *have* to have your own definition for that one; I don't really know what it means, myself. I would suggest, however, that it is possible to be too cautious. Unless you have a perfect crystal ball, I suggest that you can be right *every time* only by being extremely conservative, only at the expense of passing up a number of good risks to avoid an occasional bad one.

For the same reasons, I believe you should expect a fairly high proportion of "duds" among the products which are put on test. If all of the new products tested turn out to fine, profitable, high-volume items you are again being too conservative. If too many test products prove to be "duds" you are not conservative enough.

All of what I have said so far, applies primarily to the ordinary, run-of-the-mill new product. I am assuming that a truly significant new drug should be, and would be, marketed even though its possible field of use were so limited as to make it completely uninteresting from the profit point of view. If all new products

*Delivered before the A.P.M.A. Meeting, Hotel Roosevelt, N. Y.

†Manager, Market Research Department, Smith Kline & French Laboratories, Philadelphia, Pa.

were "miracle" drugs, where would be no place in the business for test marketing.

In preparing this paper, I tried to list the types of new products which we would probably put on test, but I found that approach most unpromising. Every case seems to be different. I will cite two examples of products which were tested and which did *not* reach the national market.

1. One was an alternate dosage form of an established product. There were two questions involved: would it sell? and—if it did—would the sales be new volume or volume diverted from the established dosage form.

2. The other was a new, but hardly spectacular, product in an established field. This drug had definite advantages over other agents used for the particular indication. Better results could be observed in careful studies, but we knew that few physicians make careful studies of results in this area. We also suspected that physicians by and large were well satisfied with available products.

Please understand that we have had successful test products, too. I mention these unsuccessful ones to emphasize that a proper selection of products to be tested will include some failures.

Now, my second question. Having decided that a new product will be tried out in a test market, how do we go about it? There is no set sequence of steps, but the mechanics can be discussed under three headings: Selection of the test market—planning of promotion—getting distribution.

We have divided the country into twenty markets—these markets are not to be confused with sales territories—and will select one or more of the twenty for a marketing test. Detailed sales figures, by product and type of product, are maintained by market. From them we have learned something about the geographical sales patterns of different types of products, and about the way new products seem to "take hold" in different parts of the country. We have also learned that, because of our method of distribution, some markets appear to have better year-to-year stability than others. In selecting a test market for a new product we consider these factors. We look ahead to the time when sales in the test market must be extended to a national sales estimate, and try to pick the market which will offer the fewest complications and statistical uncertainties when that time comes.

In planning promotion, the ideal rule would be to give the product being tested exactly the same kinds of promotion as might be used if the new product were being introduced nationally. There are practical limitations to this. Journal advertising is difficult to use for obvious reasons. Detailing is a problem. Direct mail, on the other hand, can be used in exactly the same way in tests as in national introductions and is the logical choice.

In preparing direct mail pieces for a test we pay just as much attention to copy, and layout, and art as we would in preparing for a national campaign. We do not cut corners on this. We always hope that the test campaign pieces can be re-run later on and used in a national campaign. Sometimes this happens. I should add that test marketing of a new product at SKF does not include formal copy testing. It would be interesting to prepare several different campaigns and compare them in several different markets, but we do not believe in such elaborate treatment for a product which we have already classified as a dubious promotional risk.

Now about getting distribution. Our products are distributed through a somewhat limited list of wholesalers—we do not sell direct to the retailer. When any new product is introduced, either on test or nationally, we consign the first shipments to our wholesale customers before announcing the product to the retail trade or to physicians.

The first announcement to retail pharmacists comes somewhat later, after we are sure that wholesalers have the new product in stock. We would like to think that every pharmacist immediately orders a supply of our new product in order to be ready for the flood of prescriptions that will soon descend on him, but we know that this is not the case. High volume pharmacies may order at once, but most stores will wait until they see some sign of movement. Actually, our statisticians would not want to much advance stocking of a test product because this might give us an entirely misleading sales pattern. In a marketing test we try to determine the flow of the product across the pharmacist's counter. Too much pipe filling could result in an accumulation of dead stock, gathering dust on the pharmacist's shelves. If we counted this dead stock as legitimate sales, we would be far too optimistic in our appraisal of the product's future.

We have given a lot of thought to the proper size of original consignments, too. We want a sufficient supply of the product in trade channels to assure that it will be available to those pharmacists who get prescriptions, but we must guard against making our consignments so large as to have dead stock in the wholesalers' hands. You always have to guess on this, for if you had any way of knowing what the consignments should be

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A Package that Stands Out SELLS OUT!

On a crowded display counter, it's the appealing package that gathers no dust! Shoppers are quick to notice the smart, colorful wrap . . . To examine it . . . To BUY!

Today attractive wrapping is available for an almost endless variety of products at low cost—thanks to fast, modern "PACKAGE" machines.

A line of over 80 basic "PACKAGE" models—the most extensive in the world—enables you to select the machine ideally suited to your product. Moreover, the machine itself will be individually engineered to fit your production methods.

Most models are adaptable for virtually any plain or printed wrapping material, are adjustable for numerous package sizes, and wrap at the highest speeds consistent with efficient operation. All are constructed to give you years of trouble-free service.

Whether you have an immediate packaging problem, or whether you merely wish to examine the possibilities of improving an established package, our representative is prepared to make suggestions. Why not arrange to talk with him?

Write or phone our nearest office

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Over 80% of America's machine-wrapped products are wrapped on "PACKAGE" machines

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PACKAGE
MACHINERY COMPANY
SPRINGFIELD, MASSACHUSETTS

NEW YORK CHICAGO BOSTON CLEVELAND
ATLANTA DALLAS DENVER LOS ANGELES
SAN FRANCISCO SEATTLE TORONTO MEXICO, D.F.

PACKAGING AND SELLING

HISTORY OF RETAILING

In early American days the Yankee peddler who invented retailing here loaded his goods on his back or got in a wagon and set forth to find a customer.

As the machine brought about the factory, and people began to live in villages and towns, the retailer became sedentary and discovered that customers would come to him. He promptly sat down in one place with his goods stacked around him. Now in 1950 appear the first signs that the successful retailer is the one who goes out to find the customer.

Big things, dramatic things, startling things are happening in America, to show how potent this trend is. For instance here's what appeared in the news within the space of one week:

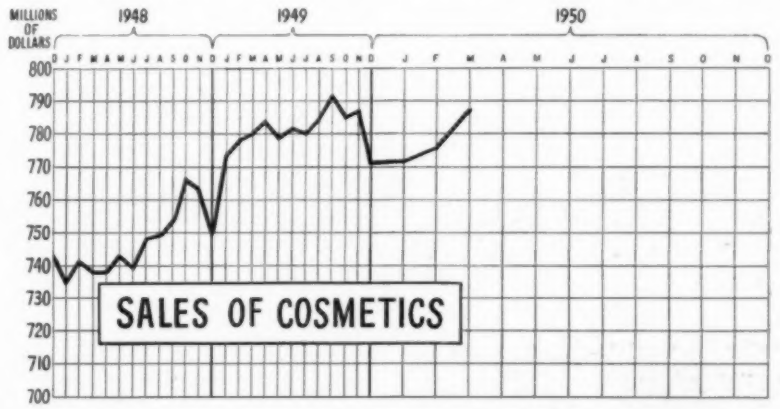
Out in Kansas a young man suddenly found himself with a million dollar business and with more orders than he could fill. His business is making small mobile retail stores, right now confined largely to ice cream stores, beauty shops and soft drink stands. Said this young man: "If you are in a retail business today you have to go out and find your customers. If they won't come to your location, then move right away to a location they will come to."

In Detroit the J. L. Hudson Company has established a new subsidiary to build a huge shopping center on the outskirts of the city. This shopping center will be larger in area than 25 city blocks. It will include 100 stores with a Hudson branch store as the largest retail unit in the center and probably the largest suburban store in existence.

The shopping center will have its own moving picture theatre and a parking space for 6,000 cars.

In Boston, Wm. Filene Sons Company opened up a completely automatic vending machine department in the new "million dollar" Greyhound terminal. This is the first time a well-balanced merchandise stock has been offered by a department store to the public in one location through vending machines. Significantly, in going to a large transportation terminal, the department store is for the first time carrying merchandise to the customer.

Retail sales of cosmetics for the twelve months ended with March 1950 amounted to $787,367,000. This compares with $775,661,000 for the twelve months ended with February 1950, and with $779,852,000 for the twelve months ended with March 1949.



Make-up for Super-Markets

The recent Super Market Institute Convention had its first cosmetic display. Helen Neushaefer, whose nail enamel and lipstick have been forging ahead to a major position in syndicate stores, entered the show with a booth and a promotional plan consisting of display material designed particularly for these stores.

Before entering this show, A. Satorious & Company had been testing out a number of smaller super markets with reported good success. Based upon these test stores and test areas, Helen Neushaefer was able to assure super market operators that nail enamel and lipstick are ready sellers in the super market, and the fact that women like to do as much of their shopping as possible in the smallest, concentrated area and that they visit super markets practically every day means that cosmetics in this price range with mass recognition are ready sellers.

Call it Service

The shopping centers which are like little self-contented cities, and which are springing up outside of suburban or city areas in many parts of the country have long been noted for the customer conveniences which they include. Some of these services in this little area devoted exclusively to shopping have been day nurseries, moving picture theaters, cocktail lounges and store deliveries to the parked automobile. Just as an example of what some branches of the retail trade may be headed for in the competitive era which may now be dawning is shown by the antics of the drive-in-theater people.

This is an industry which has been expanding with exuberance and enthusiasm, and no more does one open air theater close than two more spring up. Here are some of the things that some

PROFESSIONAL CARE In Packaging, Too . . .

Those fine pharmaceuticals which you produce under the most modern techniques, deserve the same professional care in packaging—surroundings which are as spotlessly clean as the two superb plants of Ivers-Lee—equipment, facilities and personnel which are the last word in economical, efficient, professional packaging—*Sanitape-Sealtite. This, plus unique consumer advantages—Convenience—Attractiveness—Protection—are yours when you place complete responsibility for every detail in Packaging Headquarters—Ivers-Lee. A fine product deserves professional handling—we should like to give you the complete story.

IVERS-LEE COMPANY, NEWARK, N. J.

SANITAPE — THE SEAL OF PACKAGING PERFECTION — SEALTITE

*Sanitape-Sealtite is a unique method of packaging pills, tablets, capsules, creams and powders, by which each unit or unit dose is sealed in its own airtight compartment surrounded by a crimp flange assuring complete protection and maintained efficacy. Packages, machines and methods covered by U. S. and foreign patents and patents pending. Available only through the Ivers-Lee Packaging Service. Infringing imitators will be subject to legal prosecution.

of these open air theaters are doing. To keep the children happy before show time, drive-ins offer pony rides, playgrounds and small zoos. Some theaters offer a day nursery; others have a bottle-warming service with a trained nurse on duty. Dancing, bowling, boxing, deck tennis and beauty contests have become featured pre-show events. Several drive-ins cater to general family needs; doing the family laundry or having a mechanic available for minor repairs are common. Some will even send ushers to do food shopping while the patrons watch the picture.

Leading retailers are, we would guess, a little better trained merchandisers than open air theater operators. So if this thing spreads, we would expect some very fancy showmanship in retail operation.

Package Pointers

It is estimated that the total amounts spent for packaging has risen from an estimated $5,500,000,000 in 1945 to about $7,000,000,000 now. In the opinion of many, the present trends in retailing, that is super market operation, self-service and the steady growth of automatic machine vending, packaging is in its infancy not only in respect to dollars invested, but from the viewpoint of scientific studies in display ability and, more than anything, what the customer wants.

John J. Clarey, Jr., assistant vice president of Bristol-Myers, speaking recently on the subjective approach to what the customer expects from a package, reduced this to five points. The package, he said, should protect the product, should be attractive at the time of purchase and while in use, should be as functional as practicable, should not be inconvenient to open or use, and the retail price, including the package must represent value.

As an example of how packaging practices can improve trade relations and more than justify a slight increase in cost, Mr. Clarey said that instead of packing shipping cases with one gross of a product as has been the practice for years, Bristol-Myers now packs no more than six dozen to a case and usually only three dozen. The result has been greater cooperation and good-will from wholesalers and also that both the company and the wholesalers' salesmen can now "trade-up," since if a dealer wants four dozen, it is obviously easier to trade him up to a case of six dozen than a gross.

The Druggist and Consumer Demand

Retail druggists have always been strong supporters of national advertising and over recent years an increasing number of branded, packaged products in the drug store have been nationally advertised by the manufacturer who has deliberately, and with the cheering approval of the druggist, sought to identify his product with the public and to create what in advertising circles is sometimes called a consumer demand for his product. Because there are over 50,000 drug stores and because these stores are distributed throughout every fairly worthwhile trading center in this country, the druggist has provided mass market distribution for heavily advertised convenience or demand products in the proprietary medicine field and in the cosmetic and toilet preparation field.

Most druggists during this period of the last 25 years have become completely sold on the idea that it is the manufacturer's obligation and duty to create a demand from the consumer for his product and that it is merely the obligation of the druggist to keep this merchandise in stock conveniently available to the consumer and ready to be handed out for a cash exchange.

To a large extent the druggist, together with the retailers of other branded packaged merchandise, particularly convenience merchandise, have fallen into the habit of saying to manufacturer's salesmen, "You create the demand and we will stock and sell it." Just what this ready compliance of the druggist in the theory of mass advertising which creates a consumer demand may mean to drug stores is suggested by a recent survey of non-drug store outlets now selling dentifrices.

Here is how the distribution of a leading dentifrice by retailers, other than drug stores, stacks up. This dentifrice may now be found in 70.4 per cent of the combination groceries, in 55.6 per cent of grocery stores, in 89.2 per cent of the country general stores, in 79.1 per cent of department stores and in 12 per cent of delicatessens. It is true that a dentifrice can be classified as a mass utility or convenience product which should be available anywhere and everywhere for the utmost convenience of a customer, who should not have to and does not wish to do any shopping for a product of this kind. Nevertheless, the dentifrice is selected here as typical of a wide variety of toilet articles and proprietary products which were once looked upon as part of the professional field of the druggist.

When the druggist said to a salesman of an article of this kind, "You create the demand and we will sell it," perhaps it should have occurred to him that once the demand had been created, any retailer of any kind could and would equally sell this product and that neither the druggist nor his professional standing would then be particularly needed by the manufacturer.

It might be hazarded as a guess that at one time some years ago the druggist had the opportunity of exercising his professional position in many products of this sort, and although he probably would not have been able to stem the tide of national advertising or the conception that in mass products the manufacturer should create the demand rather than the retailer, he might have put less emphasis on this question and by showing more willingness to use his own professional sales ability have secured a stronger position in the field of distribution for many household products and toilet preparations than he now has.

Certainly the complete compliance of the druggist with the theory that it was the exclusive obligation of the manufacturer to create consumer interest in his product has put him in the position where he can hardly complain at the growing dominance of the grocery supermarket, the vending machine, and other forms of distribution which seem likely to make him quite a minor factor in the sale of certain packaged products in which he was once the kingpin.

Made to Measure Shopping Center

The new $4,000,000 shopping center for Oakwood, Ohio, near Dayton, has been planned on the basis of a seven months house-to-house canvass by the New York research firm of Nowland and Schladermundt.

People seem to have quite definite ideas as to what they want in a shopping center. They approve of one story brick buildings without fancy trimmings rather than colonial, ranch type, Williamsburgh or extreme modern. They want evening shopping and plenty of parking space. With the exception of professional services, they have no objection to transferring their loyalty and their shopping from the city to the shopping center even when the shopping center is just as far away as the heart of the city. To top things

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off, they want the shopping center to contain a skating rink, a movie and a bowling alley, but not an amusement arcade.

Retailers Can Research

Retailers have not, by any definition, been notable for research. In spite of the fact some of the largest business organization in the United States are retail enterprises, and in spite of the fact that retailers have been progressively feeling the pinch of shrinking margins, very little effort has been made in research to find out if something could be done about growing retail troubles.

The National Retail Dry Goods Association, whose members take in a considerable amount of millions of dollars of business a year, allocated $25,000 to their comptrollers last year for operation studies.

One of the serious problems facing the retailer today is a more objective and scientific approach to stock control. This is particularly true for many departments, such as that of cosmetics where the merchandise consists of standard items, with many and various degrees of consumer calls by brand names and a wide variety of promotional products and gadgets for which there is a continual ebb and flow in the department.

Some time ago a Neilson Survey of 45 nationally advertised brands found that seven per cent of the stores surveyed, or one out of every 14, was regularly out of stock on one of the brands on an average day. The average retailer, this survey found, loses from 47 per cent to 70 per cent of the customers for this brand which he does not have in stock. These retailers are suffering an annual loss of from three per cent to five per cent of their annual volume on these advertised brands because of inability at some time to satisfy the customer's call.

The Director of Research of a leading advertising agency recently reported that one out of every three department store customers leaves without buying, chiefly because selections are inadequate.

A survey of shopping habits in the city of Toledo by the "Toledo Blade" found that retail stores were losing business heavily to catalogue houses and to house-to-house sellers among people living right in the city, particularly because of inadequate stock.

A survey by the University of Pittsburgh showed a department store selling $30,000,000 of goods a year could increase its business $6,500,000 if it could discover why a high percentage of its traffic walked out of the store without buying anything. Certainly in just this one problem of the "Lost Sale" seems ample justification for a really heavy investment in research.

Recently a prominent retailer stated that in a large department store incoming shipments go through 27 steps before they reach the sales counter. By persuading manufacturers to mark all packages to the store with department and order numbers, these steps were reduced to 15.

There would seem to be ample opportunity for research in just product handling for many stores.

24 Hour Retailers

The packaging of frozen food products, it is predicted, will before long be opening up the way for 24 hour retail service.

A machine belongs to no union and is perfectly happy to work 24 hours a day. Of course the people who have their capital invested in vending machines and in leasing expensive locations for them are particularly anxious to keep this equipment working as long as possible.

Many retail experts believe that one of the primary problems in retailing is to find some way to make the retail outlet, which is more and more seeking ways to be immediately accessible to the consumer in a geographical sense, equally accessible in a time sense. Full employment, particularly the employment of many million women, means either evening shopping or week-end shopping and very often the idea of giving up a week-end to shopping is not too popular a notion.

It is probably true that if packaged frozen foods blaze a trail for evening and night time shopping then all sorts of other packaged consumer conveniences will readily follow this trail.

You Don't Say

Advertisers who have been disturbed by the Federal Trade Commission's intent to interpret the Wheeler-Lea Act so that they must be careful of what they do not say as well as what they do say, can now lie back and relax.

Not only has the Federal Trade Commission retreated from its position of reading into the Act something that is not there and was never intended to be there, but also the Court for the District of Columbia has made it clear that an advertiser is not required to say anything about his product. It is only when he does say something that he must tell the whole truth and nothing but the truth.

The Wagon Jobber

The grocery manufacturers of America at their convention are scheduled to discuss the operation and growing influence of the so-called wagon jobber. These wholesale grocers on wheels are really cutting in some parts of the country, not only in selling to the retailer, but particularly in the institutional field.

It is said that numerous food products are well suited for distribution through wagon jobbers where the merchandise is directly sold and delivered from the wagon. Small manufacturers in the food industry particularly seem to find the wagon jobber very valuable for dense coverage of their localized operations.

We haven't heard yet of any wagon jobber operations in this industry, although we have had traditionally many famous companies operating in exactly this way to the consumer.

It would seem to be a logical development in tune with the times where the retailer is using a very fancy assortment of methods to provide quicker and more convenient service for the consumer, to find wholesale operations moving in this same direction for the customers.

Ridiculous, All Right

A West Coast super-market recently had a promotion which they called "Ridiculous Sale."

Newspaper advertising featured this ridiculous slant, called on customers to examine the ridiculously low prices and to emphasize how ridiculous they were, used in the advertisement inverted and mixed type combined with caps and lower case letters.

Contest

This year is said to be a banner year for sales contests. Over $20,000,000 will be spent through the four companies which specialize in organizing sales contests, and in addition many other manufacturers will spend added millions on their own planning.

Contest organizers say that experience

clearly shows that merchandise prizes are a more effective stimulus for increased selling efforts than are cash prizes, free trips or other lures.

Cash prizes will appeal only to 10 per cent of the sales force—the stars who need no stimulus. But merchandise offers will absorb over 70 per cent of the sales force in the middle group who are normally content with an average performance.

Retailers Agin It

The National Association of Retail Grocers, which represents the independent retail grocers of America, is very much in favor of standardizing as many things as possible in promotions, such as coupons and are very much against such things as loss-leaders, premiums and free deals of all kinds. Even if they have not made too much progress in suppressing these practices, the consensus of opinion is that the Association's vigorous campaign has at least helped to keep things from getting worse.

In the words of a retiring president, "The loss-leader is literally a cancerous growth which can ultimately kill our business."

Packages Must Look That Way

According to an industrial research company, the illusion is the most important part of a package. That is, the package must give the illusion of size, cleanliness, simplicity of operation, strength or glamour.

According to this company, it isn't enough to have the package perform in any of these ways, it must give the effect or the appearance of these qualities to the consumer.

Some Department Stores Are Experimenting

Many business men have been coming to the conclusion that the department store, as a high cost institution sitting in the center of heavy traffic congestion, is a faltering institution.

Fred Lazarus, Jr. president of the huge and profitable Federated Department Stores, Inc., doesn't agree and states his opinion emphatically in a recent interview in Business Week. Said Mr. Lazarus, "Fundamentally, the department store has every advantage as a distributive institution, because it sells 275,000 items in the most economical place to shop from the standpoint of customer's time. That is No. 1 point. No. 2 is that most department stores' basic costs are extremley low. I say basic costs, but the costs which we create of our own volition—often through the tradition of the business—are what need to be re-examined to see if they are justified under today's conditions."

One of the members of the Federated Department Stores, Inc. is Filene's in Boston which has just opened up the large, new, completely automatic vending machine store in the new million dollar Grayhound Bus Terminal in Boston. Mr. Lazarus states that the vending machine is another method of distribution that ought to be tried out to find if it has acceptability. It is frankly an experiment. There has been no particular effort to use vending machines in other Federated Stores, except that in some of the stores there are a few machines for cigarettes, drink products and items of that kind. Mr. Lazarus states, "We are weighing the Boston experiment carefully, we are also studying other methods, what is happening in the new large supermarkets, etc.—and comparing them with costs in our own operations where we believe we are very efficient. The difference between furnishing a right amount of selling service and no selling service at all isn't quite as great as people think it is."

Department of Commerce Monthly Retail Trade Report

Retail sales of all kinds in drug and department stores showing sales for the month of April 1950 as compared with the same period in 1949.

	Department Stores	*Drug Stores*		*Department Stores*	*Drug Stores*
Atlanta	–5	+6	Minneapolis	–5	+1
Baltimore	–11	–3	Milwaukee	–10	+1
Birmingham	–4	+1	Newark	–8	–2
Boston	–10	+3	New York	–11	–2
Chicago	–7	–3	Philadelphia	–10	–1
Cincinnati	+1	–1	Pittsburgh	–12	+3
Cleveland	–10	+2	Providence	–1	+2
Dallas	+4	+8	St. Louis	–8	–5
Detroit	–12	–3	San Francisco	–5	–5
Los Angeles	–11	–8	Seattle	–8	+1

One Product—Two Packages

Book sellers are trying an experiment, which should be of interest to cosmetic manufacturers who are concerned with the high cost of the package and who would like to establish a very much simplified and less costly package for reuse.

Since there seems to be quite a trend now evidenced particularly in perfume advertising to develop more of a utility character for cosmetic products and to tone down the rare and precious atmosphere with the superlatives and glamour words, it would seem possible to have two parallel packages, one which would essentially represent the gift and the other the every day use of the product.

Simon & Schuster, Inc., big book publishers, is putting out "The Cardinal" in a $3.50 cloth-bound edition and a $1.00 paper-bound edition at the same time. "The Cardinal" has quickly climbed to the top of the best seller list. It was published in the dual edition in late March and about 450,000 copies have been sold of which 65 per cent to 70 per cent were in the $1.00 paper-bound edition.

This new method in book publishing hasn't progressed far enough to show precisely whether the same product can be sold successfully in two separate packages—that is two completely different covers—in two basically different price ranges. But the fact is that the book publishing business is in the same kind of slump that is effecting most other soft goods and the big publishers are looking for a formula that will maintain their position as book publishers and yet get them the volume they need to maintain operations.

Impulse Buying

According to the continuing national survey sponsored by the du Pont Company, impulse buying is becoming an even more potent force in retailing than was first suspected. The du Pont survey of 1945 showed that nearly half of all purchases were definitely planned before a customer entered a supermarket. Now in this new survey, only one-third of the purchases is definitely planned.

14 *ways to pack appeal*

in low-cost containers!

These fourteen container ideas give you a hint of how Scovill's vast production facilities can solve your container problem with utmost beauty and utility . . . *at no sacrifice of economy.*

We're geared to quickly adapt to your special design needs this wide range of ready-made items . . . in plain, satin, or highly-finished metals. If you do not see an answer to your problem here, our engineering staff will create unique, new effects for you . . . yet keep a close eye on cost.

Just mail the coupon, checking the number or numbers of interest to you, or stating your problem, and leave the rest to us!

SCOVILL MANUFACTURING COMPANY
Drug and Cosmetic Container Division
63 Mill Street, Waterbury 20, Conn.

Please send full details of your design and manufacturing facilities.
I am interested in:

1 & 2 ☐ Perfume Holder
3 ☐ Bobby Pin Holder
4 ☐ Cigarette Lighter
5 ☐ Powder Dispenser
6 ☐ Powder Pencil
7 ☐ Powder Box
8 ☐ Toothbrush Container
9 ☐ Shaving Brush Container
10 ☐ Lotion Pump
11 ☐ Lotion Dispenser
12 ☐ Concealed Thread Jar Cap
13 ☐ Concealed Thread Bottle Cap
14 ☐ Serum Clamp

My problem is none of the above, but.....

.....

NAME.....

COMPANY.....

ADDRESS.....ZONE.....

CITY.....STATE.....

Best-selling brands in leading stores have

SCOVILL-MADE *Containers*

A PRODUCT OF SCOVILL

We are now in a position to supply
bottles and jars with fired-on ceramic
labels and decorations.
eau de cologne
cream shampoo
perfume
CARR-LOWREY
GLASS CO.
Designers and manufacturers of fine glass containers
Factory and Main Office: BALTIMORE 3, MD. • New York Office: 40 W. FORTIETH ST. • Chicago Office: 1572 MERCHANDISE MART

NEW PRODUCTS AND NEW PACKAGES

ABBOTT LABORATORIES are offering Bevidox Concentrate Capsules, which contain Bevidox Concentrate equivalent to 25 micrograms of crystalline vitamin B_{12}. They are for clinical use in the treatment of macrocytic anemias other than pernicious anemia and other clinical conditions for which vitamin B_{12} may be beneficial. Another new product is Bacitracin Ointment and Vacitracin Ophthalmic Ointment, for topical application in the treatment of pyogenic infections of the skin and external infections of the eye.

For the administration of blood or plasma without saline solution, Abbott has devised RC-Pak, a completely disposable, all-plastic primary filter drip unit to be used with any plug-in type container. There is also available the Secondary RC-Pak, to be used for the administration of blood or plasma in conjunction with saline solution in a series hookup with Venopak, Abbott's disposable venoclysis unit.

THE AMES COMPANY, INC., has developed a stable reagent tablet containing sulfosalicylic acid which is being marketed under the name Bumintest (Brand) Reagent Tablets. The advantages of these tablets in testing for albuminuria are said to be their uniform composition, the elimination of heat, and the speed in completing a test and ease of interpretation. Tablets are noncaustic and noncorrosive.

G. BARR & COMPANY is introducing two new products, Soft Answer, a cologne, and Tanspray, a suntan lotion, both packaged in metal cylindrical containers fitted with spray-type atomizers.

BIO-RAMO DRUG CO., INC., announces that Rametin, a brand of Crystalline Vitamin B_{12}, has been accepted by the Council on Pharmacy and Chemistry of the A.M.A. and will henceforth bear the A.M.A. seal of approval.

CARDINAL PARFUMS, INC., is offering a 1¼ dram vial of Heavenly Tune perfume packaged in a reproduction of a golden harp made of gold colored plastic which stands over six inches in height. The package retails for $1.

CIBA PHARMACEUTICAL PRODUCTS, INC., is ready to distribute Nupercainal Cream, a white, non-staining cream containing a local anesthetic. The cream is said to provide immediate and prolonged relief from the pain of sunburn, minor burns and abrasions by acting on the peripheral nerve endings and blocking the pain stimuli.

CORDAY is featuring eau de toilette in solid stick form in the fragrances of Toujours Moi and Fame. The stick comes in two sizes, a convenient purse-size, and a larger one for home use.

COTY INC., has introduced Shakti, a deodorant powder which gives fragrant all-over body protection. The powder, packed in a flexible squeeze bottle, can be sprayed on the skin, forming a protective film.

CURLCARE COMPANY announces the availability of Curl-Care, a new salon-type creme-oil shampoo containing lanolin which is said to wash soft curls right into the hair.

THE DE PREE COMPANY is marketing Nullo, a new breath and body deodorant in tablet form which is taken internally and is effective for from 12 to 18 hours in the control of body odors and breath odors arising from delayed digestion. Perspiration is deodorized, but there is no interference with its normal flow, according to the manufacturer.

PAUL B. ELDER COMPANY announces the distribution of Parbocyl, used for the relief of symptoms associated with rheumatism, arthritis, and minor aches and pains. The three active ingredients of each enteric coated tablet, sodium salicylate, para-aminobenzoic acid, and sodium ascorbate are said to exhibit the phenomenon of "cubed synergism" in that they all work together in their detoxifying effect.

LADY ESTHER is adding a new 98c size of Complete Creme Make-up to last year's 49c size. The cream, which may remain on the skin for 8 hours, is packaged in a flat, shell-pink container which contains almost three times as much as the smaller package.

DOROTHY GRAY, LTD., is marketing Color Cue, three plaid-cased lipsticks in a transparent plastic pouch. The shades include Portrait Pink, to be worn with blue, mauve and metallic greys; Cherry Bounce, for reds, black and neutrals; and South American, special for wear with yellows and greens.

RICHARD HUDNUT has added DuBarry Creme Superbe to the DuBarry treatment line. The new beauty cream is a bland blend of pure vegetable oils enhanced with tocopherol to help keep the skin's natural oils fresh and fluid.

THE ANDREW JERGENS COMPANY has attached a Fingertip Dispenser to its 50c bottle of Jergens Lotion, so that just the right amount of lotion can be applied at the flick of a finger.

LAKESIDE LABORATORIES, INC., has prepared Lipocaps, a new lipotropic capsule which provides increased dosage of the three major

lipotropic agents (choline bitartrate, dl-methionine and inositol) in the prevention and correction of liver dysfunctions.

LEDERLE LABORATORIES is marketing Enheptin, a new drug for the control of blackhead in turkeys. It can also be used for chickens and other fowls which are susceptible to the condition. Continuous feeding of small amounts of Enheptin to the flock will prevent outbreaks of the disease.

LIPMATCH COMPANY, LTD., has introduced Lipmatch, consisting of 15 individual lip-match-sticks in a cellophane wrapped matchbook packet complete with mirror. Each of the 15 lip-matches is applied smoothly, like a brush, giving the lips full coloring plus the neat lip line. The mirror inside the cover provides a complete kit. The kit retails at 20c plus tax and is made in 5 shades, red, rose, royal, ruby, and fuchsia.

PRINCE MATCHABELLI has added two more cologne sticks to the Potpourri Cologne Stick, one fragranced with Stradivari and the other, with Abano.

McNEIL LABORATORIES, INC., has made available Orestralyn, a potent oral estrogen for the treatment of manifestations of estrogen deficiency, including menopausal symptoms and disturbances of the menstrual cycle.

JULES MONTENIER INC. is offering a new package stressing summer freshness and featuring both Stopette spray deodorant and a new contour razor.

THE NATIONAL DRUG COMPANY has introduced Ammivin, brand of Visammin (Khellin), a potent coronary vasodilator, to be used in angina pectoris, in the treatment of acute or chronic coronary insufficiency, and for the relief of spasm of the collateral vessels.

ORGANON INC. has introduced two new products: Vistora tablets, for the relief of pain and discomfort in simple headache, simple neuralgia and muscular aches and pains, painful discomforts of colds, gastric hyperacidity, and minor throat irritations; and Cehistra tablets containing prophenpyridamine available as the maleate, for the symptomatic control of the common cold, hay fever, vasomotor rhinitis, urticaria, atopic eczema and dermatitis, and some cases of asthma.

JEAN PATOU has announced that Cocktail Dry perfume, absent since the war, was again made available in the United States the first of this month. It is available in two sizes only, a one-third ounce bottle at $7.00 and the one-ounce deluxe bottle at $20.00, Federal Tax not included.

PITMAN-MOORE COMPANY has made available Tipex, a non-greasy antibiotic preparation to retard infections and promote healing in minor skin abrasions.

POND'S EXTRACT COMPANY is introducing Handy Packs, pocket sized packages of Pond's Tissues, which are presented so compactly that they do not crowd the smallest pocket or purse. Each pack contains a dozen sheets of the soft, absorbent tissues and is packed so that one is readily removable without disturbing the remainder of the tissues.

THE RIESER CO., INC., is offering Venida Spray Sun Tan, a new lotion packaged in a spray-top bottle. The lotion is not oil, greasy, or sticky, and does not cause sand or dirt to cling to the skin. The spray action prevents waste, leakage or spillage and permits the lotion to be applied from any angle.

RIKER LABORATORIES have developed Veriloid, a new drug for the treatment of high blood pressure. Taken by mouth in tablet form, the drug reduces the pressure by dilating the small blood vessels of the body and may be taken indefinitely since it does not build up tolerance to itself.

HELENA RUBINSTEIN has prepared two new lotions for treating dandruff, Dandruff Control Lotion for Oily Hair and Dandruff Control Lotion for Dry Hair. These lotions are said to relieve the scalp condition at once.

SHARP & DOHME, INC., has announced the release of two new products: Thrombodent Dental Cones, designed to accelerate firm clot formation and minimize infection following oral surgery, and Aspivite Capsules, a protective analgesic preparation for relief of headache, neuralgia and muscular pains, effective in treatment of rheumatic fever, rheumatic polyarthritis, rheumatoid arthritis and intra-ocular inflammation.

SMITH-DORSEY COMPANY has announced the availability of Testronate, an aqueous suspension of pure crystalline testosterone indicated in male hypogonadism, eunuchism, and male climacteric; in primary dysmenorrhea, premenstrual tension, and in controlling menopausal symptoms. Smith-Dorsey has also announced the addition of a 30 microgram, 10 cc. rubber capped vial of Crystalline Vitamin B_{12} to their 15 microgram vial.

SMITH, KLINE & FRENCH LABORATORIES are introducing a new presentation of khellin, Eskel, for the treatment of angina pectoris and bronchial asthma. Advantages of the new product are listed as a greater coronary dilating activity than aminophyllin in the isolated heart, a prolonged therapeutic action, shows no effect on the myocardium, and has only an insignificant effect on the blood pressure and pulse rate.

E. R. SQUIBB & SONS has adopted the trade name, Stilbetin, for its diethylstilbestrol tablets, which will be available in bottles of 100 and 1,000.

THE UPJOHN COMPANY is offering Cebetinic Tablets for the treatment of iron-deficiency anemia and for anemial of pregnancy, growing children, and persons suffering from conditions resulting in chronic loss of blood or faulty absorption caused by disorders of the alimentary tract.

NEWS...

"Aerosol Development" Formed

Aerosol Development, 60 E. 42nd St., New York 17, a new service in the aerosol industry was recently established, for the purpose of safe-guarding those developments already made, as well as for directing future developments for the new products utilizing the aerosol principle. Among the factors with which Aerosol Development will be concerned are the selection of formulation, container, valve, liquified gas, and filling procedure, as well as solubility, corrosion, desired pressure and spray pattern of the pressure propelled products.

FREDERICK G. LODES

Frederick G. Lodes, who has been associated with the aerosol field for the past five years, will serve as director of the new organization.

Rand To Receive Medal

William M. Rand, president of Monsanto Chemical Co., will receive the Chemical Industry Medal for 1950, according to the American Section of the Society of Chemical Industry, donor of the medal. The medal will be formally presented at a meeting of the American Section following a dinner in his honor on November 3. Mr. Rand is the seventeenth recipient of the Chemical Industry medal.

Fuchs Appointed by Mann Chems.

Charles H. Fuchs has been appointed sales manager for Mann Fine Chemicals, Inc. He has been connected with the pharmaceutical industry for many years, both as production and plant manager and in sales.

Collins Elected V.P. of Exchange

A. B. Collins, president of the National Drug Company, was elected vice-president of the Philadelphia Drug Exchange at a special meeting of the board of directors.

DR. ROBERT S. SHELTON

Appointed by Merrell

Dr. Robert S. Shelton, vice-president and director of the Wm. S. Merrell Company, has been appointed to the new post of research adviser to top management, while Dr. Harold W. Werner was made director of scientific laboratories. Dr. Werner has been associated with Merrell since 1943 as head of the pharmacology department, and in his new position will be responsible for the direction and operation of all Merrell scientific laboratories.

DR. H. WERNER

Lerch to Open N. Y. Office

Stephen Lerch, former manager of the Industrial Engineering division of E. R. Squibb & Sons for the past eight years, has announced the opening of his office at 175 Fifth Ave., New York. He plans to offer his services on a consultation basis to a limited number of firms, especially those engaged in the manufacture of pharmaceuticals and allied products.

Merck Leases Danville Plant

Merck & Co., Inc. has completed an agreement with the Army Department for a 15-year lease and eventual purchase of the government-owned Cherokee Ordnance Plant near Danville, Pa., according to George W. Merck, chairman of the board. The plant was built and operated for the government during the war by the Heyden Chemical Corporation.

Merck will assume the burden of maintenance, which was costing the government about $100,000 a year, and will pay a yearly rental of $30,000 for that portion of the plant it intends to use. The company has an option to buy certain sections of the plant during the 15-year lease and will purchase the remainder after 1965. The Danville plant is expected to be ready for operation by next spring.

ROBERT A. HARDT

Hardt Named Hoffmann Director

Robert A. Hardt, vice-president and director of sales and advertising, Hoffmann-La Roche Inc., has been appointed to the board of directors and the executive committee.

Named Chiris Agent in Canada

Stuart Brothers Company Limited of Montreal and Antoin Chiris established a joint distribution arrangement for the Chiris products of Canada on July 1st. With offices in Montreal, Toronto, Winnipeg, and Vancouver, Stuart Brothers are equipped to give complete service to the soap, perfumery and cosmetic industries in Canada.

Brasilieres Appointed by Ritter

Gaston Basilieres has been appointed office manager of F. Ritter & Co. (Canada) Ltd., for Eastern Canada. He has been associated with Dr. Alexander Katz, president of Ritter, covering the flavoring and perfume fields for many years.

A STOCK BOTTLE WITH Slender Grace

L-33

3 other Stock Bottles

Beauty of design, durability, uniformity and dependability are characteristics of these SWINDELL bottles. Available from ⅛ ounce to 16 ounce sizes.

Here is proof that true beauty of design and the American system of mass production can go hand in hand!

The L-33 stock bottle has eye-catching grace and appeal that makes it an ideal package for any product to be sold to or used by women.

And it also has the traditional SWINDELL quality that protects your product and insures you against undue shipping losses.

L-33 is immediately available from stock in the following sizes: ½ ounce, 1, 2, 4, 6, 8 and 16 ounce. Write for samples of the sizes in which you are interested.

When you think of bottles, think of

Swindell

PRIVATE MOULD BOTTLES

Creative and artistic designs for private mould bottles (hand or machine made) are a SWINDELL specialty. Call on us for ideas.

SWINDELL BROTHERS, BALTIMORE, MD., *40 W. 40th ST., NEW YORK-18, N. Y. - ROBERTO ORTIZ, HAVANA, CUBA*

Receives D. Sc. Degree

Sereck H. Fox, technical director of Gelatin Products divison, R. P. Scherer Corporation, received a Doctor of Science degree from the Philadelphia College of Pharmacy and Science last month. The degree was conferred upon him in honor of his work in scientific drug manufacture.

Heads U. S. Trade-Mark Ass'n

Kenneth Perry, vice-president and general counsel for Johnson & Johnson, has been appointed president of the U. S. Trade-Mark Association for the coming year. Additional officers named include George S. McMillan, vice-president of Bristol-Myers Co., as vice-chairman; Kenneth Bonham, chairman of the board of Emerson Drug Company, director; and Dudley Brown, vice-president of American Home Products, director.

Following commencement exercises of Philadelphia College of Pharmacy and Science. Standing with Dr. Sereck H. Fox (extreme right), who received Doctor of Science degree at Philadelphia College of Pharmacy and Science commencement exercises are, left to right: Dr. Ivor Griffith, college president; Col. Samuel P. Wetherill, chairman of the board of the college; Dr. Adam Fiske, Eli Lilly, Inc.; Dr. Stanley Philip Reimann, Philadelphia Institute of Cancer; and Dr. Fox, Gelatin Products division, R. P. Scherer Corp., Detroit.

Named Health Foundation Consultant

Dr. Alfred M. Hellman, former president of the Medical Society of the County of New York, has been appointed medical consultant to the Health Information Foundation, according to Admiral William H. P. Blandy, Foundation president.

DR. ALFRED M. HELLMAN

"What's New" Art Director Honored

Bert Ray, art director of Abbott Laboratories "What's New," was honored by the Artists Guild of Chicago recently when he was presented with the 1949 Guild Award of the Year. He received the award from William H. Clark, guild president, at a dinner in Chicago on June 9.

BERT RAY

Huisking Wins Golf Trophy

Ed P. Huisking, Conti Products Corporation, won the golf tourney of the National Beauty and Barbers Manufacturers' Association for the third time in the last four years at the June 21st contest at the Huntington Crescent Club. Mr. Huisking's low gross score gave him his third leg on the NBBMA's President's Trophy and gained for him permanent possession of the cup. Other members who had previously won individual tournaments are Robert A. Kramer, Evans Chemetics, who won in 1947, and Vic Leon, I. Leon Company, 1949 winner. The President's Trophy was awarded by Edward J. Breck, John H. Breck, Inc., during his term as president of the association.

Creates New Type Membership

The Packaging Institute has established a new form of membership, the associate membership, according to C. L. Barr, president of the Institute and vice-president and general manager of F. B. Redington Company. This new form has been made in order to permit individuals in member corporations to benefit from the work of the Packaging Institute. Eligibility for the new type membership is restricted to employees of member corporations, and the $15-dues are payable either by the individual or his employer.

Dr. Brown Resigns Agency Post

Harold W. Brown, M.D., vice-president and medical director of Murray Breese Associates, Inc., has announced his resignation, to devote full time to his consulting practice for pharmaceutical manufacturers.

Arner to Extend Activities

The Arner Co. announced last month that it would extend its activities to packaging and bottling for allied fields, effective at once. Expanded packaging facilities have enabled the company to initiate this new service.

Phillabaum Named Dist. Manager

Ben F. Phillabaum has been appointed district manager of the newly created east central district of Bristol-Myers' eastern sales branch, according to Joseph P. Hardie, vice-president in charge of sales. He will coordinate the activities of seven of the company's sales representatives in Michigan, Indiana, Ohio, West Virginia and Kentucky, operating under the supervision of the eastern branch manager.

Becomes Toni Director of Research

Dr. Joseph H. Brant, director of research for Bates Manufacturing Co., Lewiston, Maine, was named director of research for the Toni Company, according to Raymond E. Reed, vice-president in charge of research and development.

#1

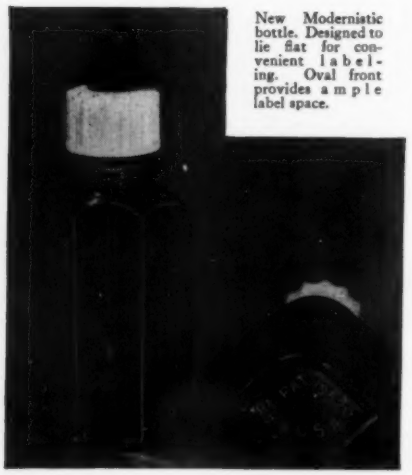
Non-rolling, extra-depth, Bakelite cap; thick-flange rubber bulb; Saftee-ball glass.

#3

Regular plastic cap; thin flange rubber bulb; semi-blunt glass.

#4

Metal cap; oil-resistant Amekine synthetic rubber bulb (without strong odor); blunt glass.



New Modernistic bottle. Designed to lie flat for convenient labeling. Oval front provides ample label space.

New Perfection

DROPPING PARTS

Simplify Your Packaging Problem

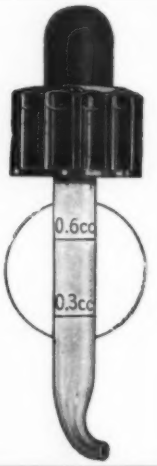
The wide variety of sizes, styles and colors in New Perfection's complete line of dropping parts offers the answer to your packaging problem. Each component part is designed to present and administer your product in the most attractive, convenient manner. We supply dropping parts to fit your bottles or furnish the complete unit.

DROPPER GLASSES CAN BE CALIBRATED IN COLOR

An inexpensive extra that adds great convenience to the use of your preparation. The dosage you desire in the color you specify is accurately and permanently printed on the dropper glass. Trade-marks and firm names can also be imprinted.

#2

Non-rolling, extra-depth Bakelite cap; thick-flange rubber bulb; special bent glass, plain or CALIBRATED.



RUBBER BULBS are supplied in many styles and colors. Oil-resisting **AMEKINE** synthetic rubber is used for oil preparations; natural rubber is supplied for other products.

CAPS of plastic or metal can be furnished in a complete range of sizes and colors.

DROPPER GLASSES are available in a wide variety of styles and sizes; plain or **CALIBRATED** in any color to mark specific dosages.

BOTTLES in an attractive modernistic style in Amber, Blue, Green or Clear glass are available, with dropping parts, in the following sizes: 2 cc, ⅛, ¼, ½, 1 and 2 oz.

Write for Samples and Quotations

PENNSYLVANIA GLASS PRODUCTS CO. INC.

"Glass Goods of the Better Kind"

430 N. CRAIG ST. • PITTSBURGH (13), PA., U.S.A.

Montgomery Honored by Fritzsche

John H. Montgomery, vice-president in charge of sales and general administrative activities of Fritzsche Brothers, Inc., was guest of honor at a dinner on June 1st given by the company's officers and directors and by the active members of the "Quarter of A Century Club." He was the forty-fourth member of the twenty-five year club. Among those who spoke on behalf of Mr. Montgomery at the celebration held in the New York Athletic Club was J. H. Leonhardt, president, who announced that, upon his own retirement, Mr. Montgomery would succeed him as president of the Fritzsche organization.

Mr. Leonhardt and his secretary, Mary Neary, presented the honored guest with many anniversary gifts, including a substantial government bond from the firm's board of directors, and a gold engraved wrist watch from the employees.

To Compete for Dearborn Trophy

The Chemical and Allied Industries Association of Michigan will be host to the Chicago, St. Louis, Cleveland and Cincinnati associations on July 25 at the Birmingham Country Club, on the occasion of the annual competition among Chicago, St. Louis and Detroit for the Fort Dearborn trophy in golf. During the day, bridge, canasta, and other activities will be conducted for the ladies, in addition to the golf outing.

Bergman Appointed Sales Director

Frank Bergman has been appointed director of sales for the Modern Art Printing Co., 67 Kent St., Brooklyn 22, specialists in plastic decoration and kindred items. Modern Art Printing Co. recently perfected and patented a new method for printing on polyethylene containers.

Whitehall Purchases Hope, Inc.

Whitehall Pharmacal Co. has announced the purchase of Hope, Inc., manufacturer of denture brushes, cleaners, and powders. The company will take over all functions formerly carried on by the Hope firm and plans to begin distribution early this month, according to William F. Laporte, Whitehall president.

Moves to California

Dr. Guy W. Clark, technical director, Lederle Laboratories division, American Cyanamid Company, has transferred his activities with the company to

DR. GUY W. CLARK

Napa, Calif. He will continue his work of clinical trials of new Lederle drugs, particularly with those used in treating anemias, but will confine himself to clinical work in cooperation with medical schools on the West Coast and in the Rocky Mountain area.

Johnson Joins Hilton-Davis Lab.

Robert K. Johnson, formerly with the Analytical Chemists of Cincinnati, has been appointed to the analytical laboratory of the Hilton-Davis Chemical Company division of Sterling Drug Inc. He succeeds Mrs. Janet Smith who has resigned.

New Parke Davis Plant in Britain

Parke, Davis & Co. is planning a new British plant for the production of its antibiotic, Chloromycetin, for countries in the pound sterling areas. Scheduled for completion next fall, the building will be located on the Parke-Davis grounds at Hounslow, England, about 15 miles west of London. The complete synthesis of the drug from raw material to the finished product will be performed in the new plant.

To Publish Magazine on Cancer

The American Cancer Society has announced that it will start publishing this fall, a bi-monthly magazine on cancer whose purpose will be to acquaint doctors with developments in cancer diagnosis, and treatment and care of patients. According to Dr. Charles S. Cameron, medical and scientific director of the Society, from one-third to one-half of the deaths caused by cancer could be prevented if detection and treatment were early. He states this could be accomplished with types of treatment now common throughout the country. Cortez F. Enloe, Inc., medical advertising agency, has been selected to create and produce the new magazine.

It is expected that circulation of the American Cancer Society magazine will include all of the 161,000 practicing physicians in the United States.

Powers Named V.P. Amer. Cyanamid

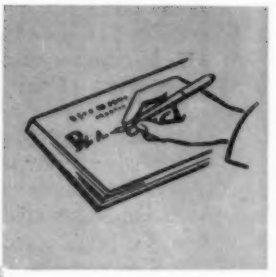
E. D. Powers has been elected vice-president of American Cyanamid Company and will be in general charge of all matters concerning plant operations, including related activities of staff departments. Mr. Powers has been with American Cyanamid since 1918 and prior to his election had been production manager of the company.

Officers, directors and active members of the Fritzsche "Quarter of a Century Club" attending dinner in honor of vice-president John H. Montgomery on his twenty-fifth anniversary with Fritzsche Brothers, Inc. In the front row, left to right, are F. L. Hilbert, H. J. McNamara, D. A. Neary, H. P. Wesemann, Mr. Montgomery, F. H. Leonhardt, president, Mary A. Neary, Dr. Ernest Guenther, Fred H. Leonhardt, Jr., and G. A. Wohlfort. Back row: A Wardman, E. B. Anderson, F. H. Lenz, E. W. Keller, F. F. Miller, W. E. Schedy, Anna M. Venicee William Keller, Charles Schneider, D. W. Bertodatti, T. J. Coyle, Anne M. Cunningham, A. N. Howlings and F. E. Riley.

You gain when we concentrate

on fewer fine chemicals

One of our specialties: **iodides**



What is the job you have for Iodides?

Is it in the medicinal, pharmaceutical, photographic or food field?

For any of these, Baker has a complete line of Iodides that will best fill your fine chemical needs, best fit the jobs you have for them.

Concentration on Iodides as one of our specialties makes this possible. Baker manufactures U.S.P. Iodides, also Iodides to meet the specific needs of many industries.

In the medicinal field—for manufacturers of Tincture of Iodine—and for photographic uses—Baker supplies Potassium Iodide U.S.P., also Sodium Iodide U.S.P. and Iodine U.S.P. Resublimed.

For salt manufacturers, Baker supplies Potassium Iodide in crystal, granular or powder form.

For manufacturers of poultry and livestock feeds, Potassium Iodide is made as 90-10 mixture, the 10% being Calcium Carbonate or Magnesium Carbonate or Calcium Stearate.

Whatever your requirements for Iodides—call on Baker. Samples and prices will be forwarded gladly upon request. Address: *Fine Chemical Division*, J. T. Baker Chemical Co., Phillipsburg, New Jersey.

Baker's Chemicals

C. P. ANALYZED · FINE · INDUSTRIAL

Retires from Armour Labs.

Frederic Fenger retired from the Armour Laboratories July first, after forty-four years of chemical research work in endocrine gland physiology. His early work with the thyroid and posterior pituitary hormones resulted in establishment of potency standards and opened the way to their use in medicine. His colleagues at Armour presented him with a portrait of himself painted by Dr. Frank H. Netter as part of a series of pioneers in the field of endocrinology.

MARION E. NORRIS

Appointed by Natcon Industries

Marion E. Norris has been appointed by Natcon Industries, Inc., to handle the advertising of its subsidiary companies, Hierstra Laboratories and Kathleen Mary Quinlan, Inc. She will also direct the consumer departments of both companies and coordinate consumer activities with advertising and production.

Boston BIMS Golf Outing

The BIMS of Boston held their first golf outing of the 1950 season at Woodland Golf Club, Auburndale, Mass., on June 7. Golf prizes were awarded to the following players: C. T. Hoye, Rexall Drug Company; Arthur Perry, Pigments division, E. I. duPont deNemours & Co.; T. B. Howell, United Consumers, Inc.; J. W. Monahan, Aetna Casualty & Surety Co.; J. P. Kelly; and Harold Ingham, Ingham of Boston. Door prizes were won by Steve Mathews of Brockway Glass Company and C. P. Seaverns of Howe & French, Inc.

Konigsbacher Appointed by Evans

Dr. Kurt S. Konigsbacher has been appointed to the staff of Evans Research and Development Corporation as Project Group Leader.

Allaire, Woodward Transfer Completed

The transfer of Allaire, Woodward & Co., to I. P. Callison & Sons was completed last month. The new company will be known as Allaire, Woodward, Inc. and will be located at 2800 North Adams St., Peoria 1, Ill. Officers include Henry Callison, president; Cecil Callison and Larry Givens, vice-presidents; and Fred T. Meeker, secretary. Joseph T. Chrobuck, formerly assistant director of the Callison Laboratories in Chehalis, Wash., has been named technical director in charge of laboratory and plant operations.

Phillips Takes Over Cummer Div.

The Chas. H. Phillips Co. division of Sterling Drug Inc. took over the management, sales, advertising, billing and shipping functions of the Cummer Company division of the same organization July 15. The reassignment of operations, the company explained, is an outgrowth of the consolidation of the sales staff of Cummer with that of Phillips in 1947.

Manufacture of Energine products will continue as the responsibility of the Cummer division at its plant in Brattleboro, Vt. The new step involves discontinuance of the Cummer administrative office in Brattleboro.

Morgan Celebrates 35th Year

Clarence Morgan, Inc., mid-western representative of Syntomatic Corporation, recently completed its 35th year in business.

Dow Chem. Purchases Bush Aromatics

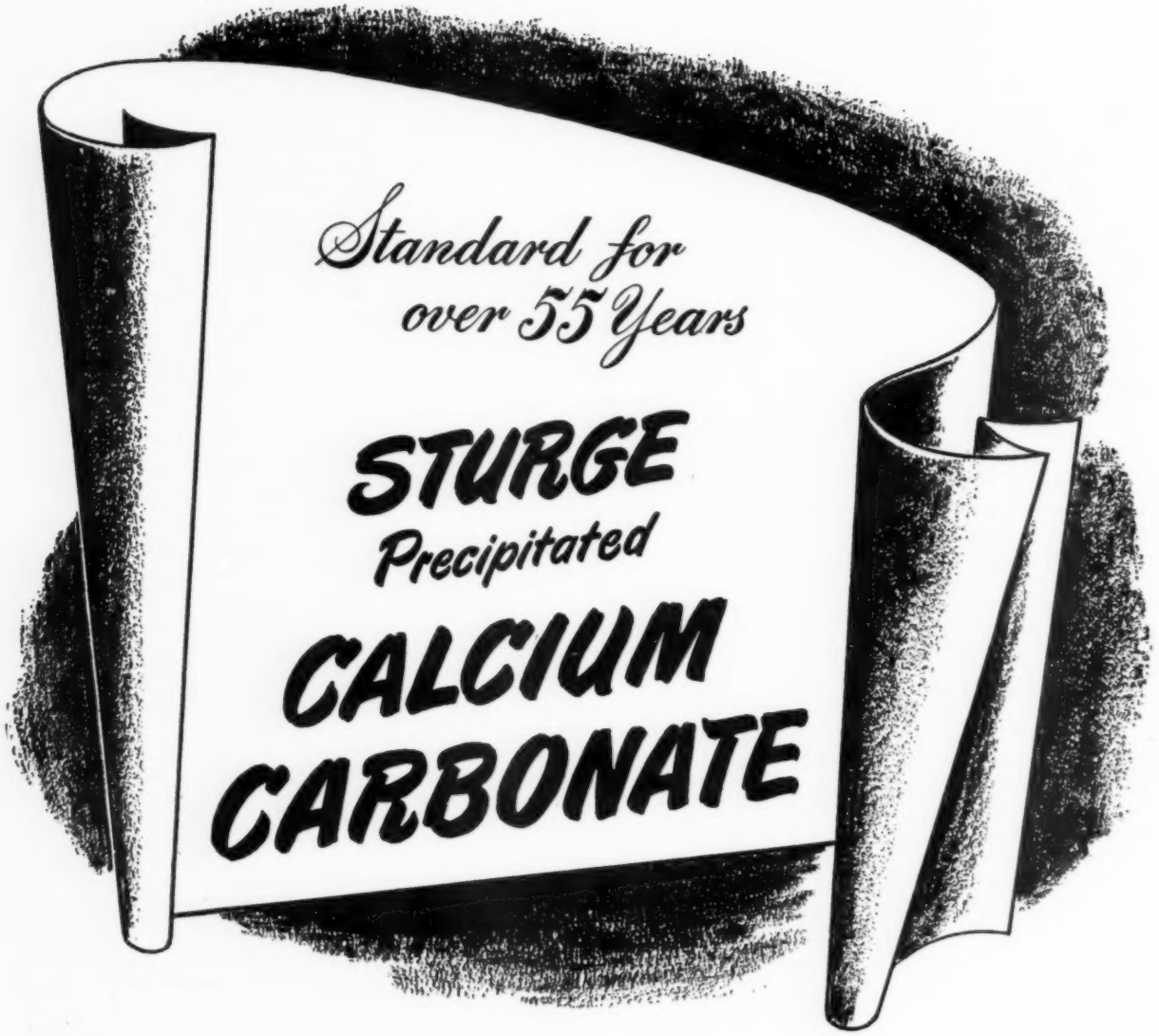
The Dow Chemical Company has purchased Bush Aromatics, Inc., of New York, which has become Bush Aromatics division of the Dow Chemical Company, according to Leland I. Doan, Dow president. Dr. Arthur Behr, who has been director of aromatic research at Dow for the past ten years, will direct operations of the newly acquired firm. Ernest Briggs, Jr., present aromatic chemical sales head at Dow, will be responsible for sales, while Burton T. Bush, president of Bush Aromatics, will serve in an advisory capacity. Edward A. Bush and Burton T. Bush, Jr. will continue as sales representatives of the new division.

The New York sales offices will remain at 136 Liberty St., New York. Aromatic chemicals of the Bush organization will continue to be manufactured in Midland, Mich., while stocks of merchandise will be carried in the new and improved Bush laboratory facilities at 629 Grove St., Jersey City, N. J. The division will be the exclusive United States, Canadian and Cuban representative of the French firm, Synarome, whom Bush Aromatics had formerly represented.

New Dow Catalogue

The Dow Chemical Company has published a new pharmaceutical chemical catalogue dealing with pharmaceutical chemicals and intermediates manufactured by the company.

Burton T. Bush, left, discussing plans for Dow's new Bush Aromatic Division with Ernest Briggs, Jr., standing, aromatic chemical sales manager, and Dr. Arthur Behr, research director.



Quality and Uniformity

LIGHT, MEDIUM AND HEAVY GRADES

Rigid Uniformity in the Specific Grade Desired

★

Depend on Sturge for Quality and Uniformity

John & E. Sturge Limited

DISTRIBUTORS: H. J. BAKER & BRO., 271 Madison Avenue, New York 16, N. Y.

Henry Named V.P. Comm. Solvents

Harold J. Henry, formerly president and general manager of Tek Hughes, Inc., Johnson & Johnson subsidiary, was appointed vice-president in charge

HAROLD J. HENRY

of sales of Commercial Solvents Corporation at a recent board meeting, according to J. Albert Woods, president. He succeeds Henry W. Denny who has retired.

Glasscrafters, Inc. Formed

Carr-Lowrey Glass Company and W. Braun Company, 300 N. Canal St., Chicago, have jointly formed Glasscrafters, Inc., which recently began ceramic decorating and labeling operations on glass containers in a new building erected on the property of the Carr-Lowrey Company, Baltimore. The former Glass Crafters, division of W. Braun Company, will continue to operate at 1223 Kinzie St., Chicago. The new Baltimore plant has been equipped with the latest type production lines for handling a large volume of bottles and jars.

Faxon Resigns from McKesson Board

Henry D. Faxon recently resigned from the board of directors of McKesson & Robbins, Inc., having been elected to that post in 1929, following the merger of McKesson with the Faxon & Gallagher Drug Company of Kansas City. He was simultaneously named regional vice-president in charge of wholesale operations in the Central West territory, until he retired in 1948.

Gives Cosmetic Courses

Florence E. Wall, consulting chemist, author, teacher and lecturer in cosmetics and cosmetology, of New York, is teaching courses in *Cosmetic Hygiene* and the *Teaching of Cosmetology* at the 1950 summer session at Clemson College, Clemson, South Carolina. The two courses, which began July 5, will extend through July 22.

George Merck Receives Award

George W. Merck, chairman of the board of Merck & Co., received a certificate of merit from the Working Press of New Jersey at its first annual convention last month, according to Arnold Martin of The Newark News, chairman of the awards committee. The award was presented in recognition of the work of Merck & Co. in "mass producing streptomycin and pioneering in the production of cortisone for the relief of rheumatoid arthritis."

Whitten Named Gair (Canada) Pres.

Charles E. Whitten was elected president and general manager of Gair Company, Canada Limited, Toronto, at a meeting of its board of directors last month. Mr. Whitten succeeds George W. Brown who died June 1. W. Russell Eccles, formerly assistant treasurer, was simultaneously appointed treasurer, while Harold L. Steele was elected to the board of directors to fill the vacancy left by Mr. Brown's death.

Morgareidge Named Chief Chemist

Dr. Kenneth Morgareidge, formerly director of the biological laboratories of Nopco Chemical Company, has been appointed chief chemist of Food Research Laboratories, Inc.

Miss Gincel Attends Credit Congress

Clare I. Gincel, credit manager of Givaudan-Delawanna, Inc., recently returned from a trip to California, during which time she attended the 54th Annual Credit Congress of the National Association of Credit Men in Los Angeles. Miss Gincel, who has been with Givaudan for twenty-five years, is a member of the Advisory Board of the Drug and Chemical Group of the New York Credit Men's Association.

Pharbil Labs. to Represent Schering

Laboratoires Pharbil, Brussels, Belgium, has been appointed distributor of Schering preparations in Belgium, Holland and Luxemburg, according to Francis C. Brown, Schering president. A. W. Smets, director general, and J. E. Smets, commercial director of Laboratoires Pharbil, represented their company at a recent conference in Bloomfield, N. J. where arrangements for processing, promotion and distribution were completed.

Named Ass't Sales Managers

Harold O. Thomas and John W. Black have been appointed assistant sales managers of Ayerst, McKenna & Harrison Limited, with headquarters in New York.

E. Claiborne Robins, president of the A. H. Robins Company, accompanying a group of Robins representatives to Miami, Fla. to attend sectional meeting of Southern and southwestern divisions. Left to right: John Norton, professional service representative; E. F. Heffner, Jr., sales manager; Mr. Robins; Dr. Eugene L. Jackson, medical director; and G. Mallory Freeman, advertising manager.

A Perfumer's Guarantee

Sometimes the acceptance of a product hinges upon a single factor . . . the men within the organization, the quality of the raw materials used or the extent of research into new products and processes.

One of the more important factors, however, is the firm's reputation and integrity.

Synfleur takes pride in its enviable reputation—a reputation built by more than 60 years of emphasis on high and exacting standards. These standards have never been relaxed. Synfleur has continuously searched for new and better aromatic chemicals for use by perfumers and soapmakers. We have continuously strived to make our products the finest available.

Through the years our skill and experience has grown . . . and our reputation with it. This reputation and the integrity behind it is your guarantee of highest quality.

Synfleur Scientific Laboratories, Inc. Monticello, N.Y.

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FOUNDED 1889 BY ALOIS VON ISAKOVICS

ATLANTA • DETROIT • HAVANA • RIO DE JANEIRO • MEXICO, D.F.
CHICAGO • MELBOURNE • BURMA • HONG KONG • BOGOTA • SAN JOSE
CIUDAD TRUJILLO • GUAYAQUIL • GUATEMALA CITY • CALCUTTA • WELLINGTON
MANAGUA • PANAMA • ASUNCION • MANILA • SAN SALVADOR • MONTEVIDEO

Dr. Enloe Addresses Canadian Ass'n

Dr. Cortez F. Enloe, Jr., president of Cortez F. Enloe, Inc., spoke on The Pharmaceutical Industry in Total War at the closing session of the Canadian Pharmaceutical Manufacturers' Association meeting held at Chanticler Hotel in the Laurentian Mountains. Speaking from his work in civil defense planning, Dr. Enloe outlined the civil defense planning program in the United States and Canada, and the program of the council on National Emergency Medical Service of the American Medical Association to which he is consultant.

Appointed by Nopco

Dr. John R. Foy has been appointed director of biological laboratories by Nopco Chemical Company and succeeds Dr. Kenneth Morgareidge who has resigned to become chief chemist for Food Research Laboratories, Long Island City, N. Y. Dr. Foy had been in charge of Nopco's Biological Research Laboratories since 1943.

Join Pfizer Antibiotic Division

Dr. Francis E. Martin and Fred C. Sands have been named members of the staff of the recently formed antibiotic division of Chas. Pfizer & Co., Inc., according to Thos. J. Winn, sales manager.

DR. FRANCIS E. MARTIN

Givaudan Opens New Canadian Office

Givaudan - Delawanna, Ltd. have opened new offices under the management of A. F. Breeze, at 684 Church St., Toronto, in order to take care of the increasing demand for Givaudan products in Canada. At the same time, according to Givaudan-Delawanna, Inc., it was necessary to make the termination of their Canadian representation by Stuart Brothers, Ltd.

Dr. Cortez F. Enloe, Jr., after being greeted by president and past presidents of the Canadian Pharmaceutical Manufacturers' Association. Left to right: William Leslie, president of Ayerst, McKenna & Harrison Limited, Montreal; Cecil White, president of Ingram & Bell Limited, Toronto; Dr. Enloe; Dr. Frank Brobst, president of R. P. Scherer Limited, Windsor, Ontario; Dr. David Menzies, general manager of Ciba in Canada.

Celebrates 35th Anniversary

Edward Plaut, president of Lehn & Fink Products Corporation, celebrated his 35th anniversary with the company on June 22, having joined the firm as a vice-president in 1915, upon the death of his father, Albert Plaut, president. He succeeded his uncle, Joseph Plaut, as president in 1921.

Parfums Charbert Appoints

Jean Leguay has been appointed sales manager of both Parfums Charbert,

JEAN LEGUAY

Inc. and Nina Ricci Parfums, according to Robert P. Johns, executive vice-president and general Manager of Jacqueline Cochran, Inc. He has been sales manager of the latter since 1946. Ethel Winston, formerly of Parfums Charbert, Inc., has been named assistant sales manager of both companies.

With Bio-Science Labs.

A. E. Hayward has been appointed head of sales and advertising by the Bio-Science Laboratories.

Danco Honored by Boy Scout Council

Gerard J. Danco, president of Gerard J. Danco, Inc., upon recommendation of the Morris & Sussex Council and approval of the National Council of the Boy Scouts of America, has been awarded the Silver Beaver for outstanding service to youth. Mr. Danco has been associated with the Boy Scouts since 1912.

Durrer on Business Trip

Ernest R. Durrer, executive vice-president of Givaudan-Delawanna, Inc., recently left on the Ile de France for a two-month business trip to Europe. He plans to visit Switzerland, France, and Italy.

Lederle Wins Safety Award

Lederle Laboratories division, American Cyanamid Company was presented with the 1949 Frank E. Redmond Grand Award for safety by the Associated Industries of New York State, Incorporated. During the thirteen weeks of the 1949 Accident Prevention Campaign, Lederle employees worked a total of 1,483,230 man-hours without an accident, the highest record attained among the more than 1000 competing plants.

Fairmount Chem. Names Rep.

The Fairmount Chemical Co., Inc. has appointed the DeLamar-Hendrey Chemical Company, Inc., Chicago, as mid-western sales representative. The company will cover Fairmount's full line, including hydrazine and its salts, photo and diazo type chemicals, intermediates, perfume and flavor chemicals.

METAL CONTAINERS *and* CLOSURES
by
BRIDGEPORT

Vanities
Jar Caps
Bottle Caps
Drawn Talc Containers
Powder Boxes
Perfume Vial Cases and Caps
Lip Brushes
Dry and Paste Rouge Cases
Lipstick Containers --- Swivel, Slide, Automatic

and

Other Special Metal Products for the Cosmetic Industry

THE BRIDGEPORT METAL GOODS MFG. CO.
Established in 1909
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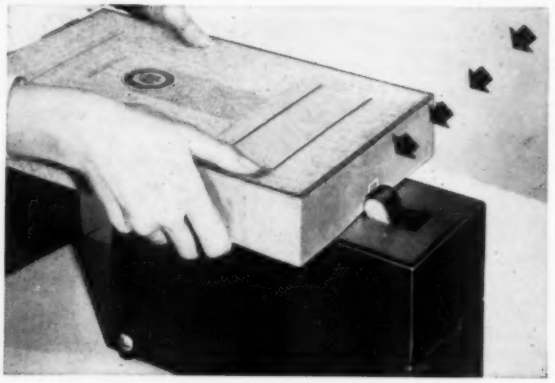
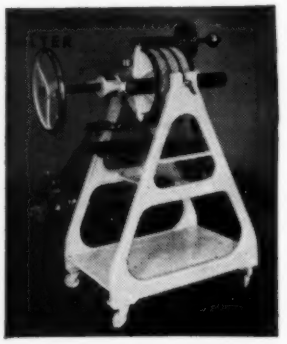


SEALS BOXES INSTANTLY

Increase output per worker and cut your packaging costs with this "SCOTCH" Manual Box Sealer. Press any box or square wrapped package against the trigger of this new machine and a tight 1½" seal of "SCOTCH" Cellophane Tape is applied instantly, without tape waste. Portable, no foot pedal or electric power needed.

Want more details? Write Dept. F, Minnesota Mining & Mfg. Co., St. Paul 6, Minn.

"SCOTCH" is the registered trademark of Minnesota Mining & Manufacturing Co.



ERTEL
BACTERIA RETENTIVE FILTERS

...sizes from 1 to 10 liters of aqueous solution per minute

Balanced body of filter permits easy rotation to vertical operating position. Illustration shows filter in loading position.

★ One of the most widely used filters for safeguarding saline and dextrose solutions, sodium citrate for whole blood and blood plasma preparation, penicillin, intravenous fluids, etc. Provides dual filtration and special fibre removal feature. Can be provided with special steam generating unit for complete sterilization of circulatory passages and filter disks. Described in Catalog 18, please ask for your copy.

ERTEL SERVICE: Send sample of your product for laboratory test. We will filter and return with enough recognized Ertel Asbestos Filter Sheets to prove the superior results in your plant.

ERTEL ENGINEERING CORPORATION
KINGSTON NEW YORK
Representatives in Principal Cities

ERTEL

MANUFACTURERS OF HIGH GRADE ERTEL ASBESTOS FILTER SHEETS
ASBESTOS SHEET FILTERS • CYLINDER TYPE DISC FILTERS
PYROGEN FILTERS • VACUUM BOTTLE FILLERS • MIXERS • CAPPERS
CENTRIFUGAL AND SELF-PRIMING STAINLESS STEEL PUMPS

Visits South America

Maurice Cola, consultant perfume chemist for Roure-Bertrand Fils & Justin Dupont, recently returned to New York after an extended trip through

MAURICE COLA

Central and South America, where he visited agents and clients. Mr. Cola returned to France June 27 for a stay of 3 or 4 months, after which he expects to visit New York once again.

Upjohn-Penick Cortisone Precursors Expedition

The Upjohn-Penick Expedition for Botanical Exploration, organized for the purpose of surveying the availability of arrow poison plants, with reference to the genus Strophanthus, in Africa, has completed its field work under the supervision of L. J. Brass, Field Director, and E. F. Woodward, Business Manager of the Expedition. During the course of their study and survey of the incidence of arrow poisons suitable as sources for chemicals as precursors for the manufacture of cortisone, the expedition traveled 11,000 miles.

Search for Strophanthus was instituted early in May, 1949, shortly after the announcement by Drs. Hench and Kendall of the Mayo Clinic, of the dramatic response secured in arthritis patients by treatment with cortisone. The Upjohn Company of Kalamazoo, Michigan, approached S. B. Penick & Company, New York botanical drug house, for supplies of Strophanthus sarmentosus or of sarmentocymarin, the chemical reported to be present in this species.

Only two species of Strophanthus are known commercially but their suppliers were approached to obtain samples of Strophanthus sarmentosus for experimental work. Detailed study of the isolation of sarmentocymarin established that little was known of the exact botanical identification of the species of Strophanthus from which the chemical was secured. Dr. Walter A. Jacobs, of the Rockefeller Institute, has isolated sarmentocymarin from a sample labeled S. hispidus and again from one labeled S. sarmentosus, but a second sample of S. sarmentosus did not yield the same material. Similarly a sample of seeds found to contain the base for cortisone was uncovered in Dr. T. Reichstein's laboratory in Switzerland, but again its botanical identity was not definitely known. Consequently The Upjohn Company and S. B. Penick & Company decided to send an expedition to Africa, staffed by botanical experts. The expedition actually started on October 20, 1949, when E. F. Woodward flew to Europe to study herbarium specimens of Strophanthus species in London, Brussels and Paris. At the same time, L. J. Brass made his preparatory studies at the New York Botanical Garden whose wealth of information on Strophanthus species was made available to him. Field work began when Mr. Brass joined Mr. Woodward in Africa late in November.

Cuttings, roots, stems or seed samples of 20 species of Strophanthus were obtained by the expedition, including one species which may not have been previously described. It is estimated that about 35 species of Strophanthus occur in Africa. Fifty-four samples of seeds of Strophanthus were secured. The fruiting time of some of the species did not coincide with the period covered by the expedition, although it was in the field for a six-month period. Additional collections are to be made by qualified observers who will supply herbarium specimens as well as samples of the seeds. Where no qualified observers were available, instruction in the recognition of local species was given to individuals who expressed willingness to collect the samples.

Regional surveys of the availability of the various species have been made and estimates of the time required to cultivate and possibly produce the species, should they prove to be worthy of such intensive work, indicate that four to five years will be required to secure a mature crop of seeds for this purpose. To produce one kilogram of ripe seeds required approximately 50-200 seed pods. No estimate is available at present of the quantity of seeds required to produce one gram of cortisone because sufficient sarmentocymarin has not yet been produced to determine the efficiency of the process of the necessary chemical conversions. Mr. Brass recommends that a study of other plant parts of the genus Strophanthus be instituted.

Cuttings of the plants obtained on the expedition have been sent to the New York Botanical Garden for propagation and study of the growth habits of the plants under controlled conditions. Herbarium specimens for classification will be given to the New York Botanical Garden and the Royal Botanic Gardens at Kew, Surrey, England, where they will be available for study by qualified botanists.

It is estimated by Dr. W. G. Bywater, Director of the Expedition and Director of Research of S. B. Penick & Company, that the chemical work necessary to study completely the glycoside content of the plant materials collected would require intensive application by chemists for a period of 18 months to three years.

Three Nobel prize winners who spoke at scientific symposium marking dedication of new laboratory building of the Sterling-Winthrop Research Institute. Left to Right: Dr. Maurice L. Tainter, director of the Institute; Dr. Wendell M. Stanley, University of California; Dr. Albert Szent-Gyorgyi, Institute for Advanced Study, Princeton University; and Professor Otto Loewi, New York University College of Medicine.

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FINE HEYDEN CHEMICALS

Diketan Opens New Plant

Diketan Laboratories, Inc., has opened a new manufacturing plant to meet the West Coast's expanding demands for vitamins, minerals and other pharmaceutical products at 5837 West Adams Boulevard in Culver City, Calif. E. D. Reason, formerly general manager of the E. S. Miller Laboratories, Inc., Los Angeles, has been appointed general manager of the new Diketan plant. The plant is said to be able to produce more than twenty-five million compressed tablets per month and is one of the few West Coast firms having extensive facilities for output of pharmaceuticals in capsule form.

New manufacturing plant of Diketan Laboratories, Inc., located in Culver City, Calif.

Plax Appoints Western Rep.

Mailler Searles, Inc., San Francisco, has been named West Coast distributor by Plax Corporation, Hartford, Conn. M. Walthall Turner of the Plax sales organization will transfer to Mailler Searles as representative in Northern California, Washington, and Oregon.

McLimans Heads Bacterial Research

William F. McLimans has been appointed head of bacteriological research at the Upjohn Company and succeeds Dr. John F. Norton who has retired after seventeen years with the company.

W. F. McLIMANS

To Armour Labs. from A.E.C.

Dr. A. H. Holland Jr. has resigned as director of the office of research and Medicine of the Atomic Energy Commission to become, on August 1, associate medical director of Armour Laboratories, Chicago.

Charles Revson Wins Alger Award

Charles Revson, president of Revlon Products Corporation, was named early this month as one of the seven winners of the fourth Horatio Alger awards made by the American Schools and Colleges Association.

Named Director of Research

Dr. Louis Magid has been appointed director of the pharmaceutical research laboratories at Roche Park, according to Dr. M. F. Furter, vice-president in charge of pharmaceutical research and production, Hoffmann-La Roche Inc. Dr. Magid had previously been in charge of pharmaceutical research laboratories at the William S. Merrell Company and William R. Warner & Co., Inc.

Bell With Tablerock Labs.

C. W. Bell, for the past 12 years with the Bilhuber-Knoll Corp., has accepted a position with the Tablerock Laboratories of Greenville, S. C. as assistant manager.

CHARLES W. BELL

Pedinol Plans Expansion

Pedinol, manufacturers of ethical pharmaceuticals, recently began expansion of their manufacturing facilities to meet the need for distribution in new territories. Present plant facilities at 2 West 18th Street, New York, are being enlarged, while a site for another plant is being sought. The first plans of expansion, according to Elliot Goldwag, president, will be to enter the northeastern seaboard market area along with the simultaneous introduction of two new Pedinol products, Hydrisinol, a hydrogenated, sulfonated castor oil creme, and Shufung, a fungicide deodorant liquid packaged in an aerosol bomb.

Radcliffe Appointed Sales Mgr.

Robert A. Radcliffe has been appointed sales manager of the Modern Folding Carton Corporaiion.

Pacific Borax Co. Changes Address

Pacific Coast Borax Co. moved into new offices late last month at 100 Park Avenue, New York 17.

Thomas J. Eaton Marries

Thomas Jewell Eaton, son of Melvin C. Eaton, president of the Norwich Pharmacal Company, and Mrs. Eaton, was married on July 1, to Annette Saunders Ruby, daughter of Mr. and Mrs. Paul Romaine Ruby, Oneida, N. Y. Young Mr. Eaton is associated with the Norwich Pharmacal Company, and the couple plan to live in Norwich.

George W. Brown

George W. Brown, president and general manager of Gair Company Canada Limited, Toronto, since 1930, and a member of the board of directors of Robert Gair Company, Inc., New York, died June first after a long illness. He was 64 years old. Surviving are his widow, the former Rose Isabel Browne of New York, four daughters, Mrs. George Coles, Mrs. Charles Baker, Jr., Mrs. Jack Walker and Mrs. Gordon Shaw, all of Toronto, and two brothers and two sisters residing in New Jersey.

George H. Gift

George H. Gift, manager of the merchandise promotion department of Parke, Davis & Co., died early in June at his home in Grosse Pointe, following several weeks of illness. He was 63 years old. Mr. Gift had been a member of Parke-Davis since 1911. He is survived by his widow, Mrs. Grace Bond Gift, and two sons, Kendall Power of Grosse Pointe, and Frank J. Power of Pittsburgh.

Here's how

Holland-Rantos Company gets high-quality process water

at low cost...

Manufacturers, distributors and exporters of H-R Medico-Surgical Specialties, Holland-Rantos Company at its plant and laboratory at Trenton, N. J. requires a steady supply of high quality process water. This problem was economically solved six years ago by the installation of a Dorrco D-I System . . . one of the first in existence. The "E-12 Unit" pictured above has been in continuous operation since October 1944.

This is but one example of how D-I water pays off . . . in terms of quality . . . in terms of economy. Regardless of industry, if your process requires water of controlled mineral content, a Dorrco D-I System will produce it . . . in any amount . . . at a fraction of the cost of distillation.

The Plant Manager at Holland-Rantos states that:

"De-Ionized water is being used in all products in place of distilled water.

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"Dorrco D-I water, at an overall expense of 40 cents per 1000 gallons, has cut processing costs.

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RESEARCH ENGINEERING DORR EQUIPMENT

MANAGEMENT FORUM

By Francis Chilson
Industrial Consultant

Globe Circlers

A little while ago I related the story of the inspired manner in which swindle sheets are composed. I wish now to tell the story of a couple of imaginative gents in the trade who, not only thought up a plausible reason for making a world tour at company expense, but made it. The revelation of this story was necessarily delayed until my file of reports from the foreign agents of my private gestapo were completed.

The story begins last year in the private office of J. Crosby Coughlin, vice president and salesmanager of Clark Cleveland Laboratories, Inc., makers of Fasteeth, that wonderful stickum which keeps your store teeth from falling into your soup. J. C. or, as he is known to his intimates, Lord Plushbottom, was sitting in his plush upholstered chair (an old family tradition, y'know) wondering how he could plaster more Fasteeth on a world already pretty well plastered, when suddenly an idea hit him like a Mack truck.

It was an idea so staggering in its simplicity that only a marketing genius could have conceived it. The idea was this: the British have a national health program; they also have bad teeth. Ergo; He, J. C. would go to England and sell Anuerin Bevan the idea of improving national health by pulling every tooth out of every British head, replacing them with shiny new sets of store teeth acquired through the Marshall plan, while he, milord Plushbottom, would sell them Fasteeth to keep the teeth stuck in with. Simple, what? You can see the advertising possibilities: "Every Briton can grin again!" As for the market possibilities: mathematics fail me. Fifty million British using a quarter ounce of Fasteeth a day times three hundred sixty-five days a year plus ten percent for spillage. Stupendous!

When an idea hits Mr. Coughlin he acts. The next instant he was in the office of Carleton Cleveland talking fast and furiously and before Clevey knew what struck him, he had authorized an unlimited expense account. That's all Crosby wanted anyway. If you can get the Boss to shell out the shekels why worry whether or not he fully understands all the details of your project.

Lest the touchy British get the impression that his mission was merely another American attempt at commercial exploitation, Crosby resolved to pose as a transplanted Britisher from the colonies and, moreover, to lend his expedition scientific prestige, he decided to take with him the company's scientific director, Dr. Don Germann. That was a master stroke. A little heavy on the expense account but still justifiable because there is nothing more important in a big selling job than setting the stage properly.

Crosby got himself on the swindle sheet of course a new outfit of Bond Street togs (sent over from London by air mail); he bought a monocle and a stout oak walking stick made in Brooklyn and hired the King's suite on the Queen Mary. Or maybe it was the Queen's suite. The clip sheet isn't entirely clear on this point. For the furtherance of his mission be changed his name to J. Throstlewaite Chomondeley, "Call me Chumley, old boy!" In regal style they set sail for England, milord and his scientific major-domo.

It is sad to relate that the mission was not an overwhelming success. The British proved to be damnably stubborn. Positively stupid in fact. They didn't *want* their teeth pulled out! Now that food rationing is over, they wanted their own choppers to sink into juicy joints, not nice, shiny new sets that could be taken out and sharpened when the joints are a bit tough. Some people don't know what's good for them. All Chumley's high powered, persuasive eloquence; all Don's health statistics and pictures of healthy, grinning guinea pigs with teeth held in with Fasteeth, failed to move the obdurate British even a little bit. Damme! what bullheaded people!

I am compelled at this juncture to interpolate a personal opinion that Coughlin's hegira to England was motivated not only by the commercial interests

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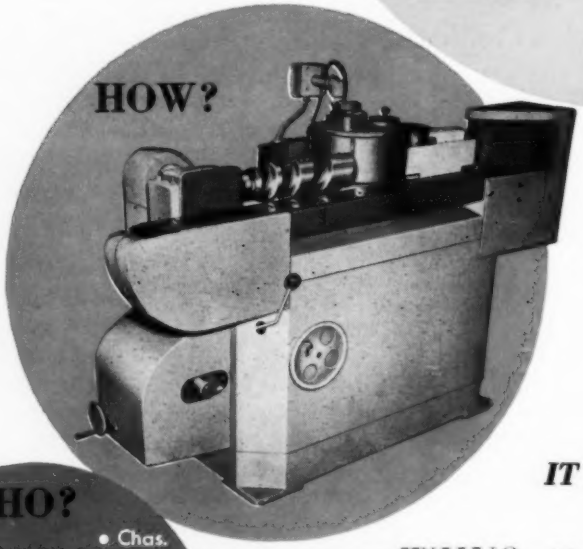

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of his company but by an atavistic desire to pull the teeth of the British lion. Had he succeeded they'd have built a monument to him in County Mayo whence his ancestors came. Indeed they'd have built monuments to him in every town in Ireland, and there'd have been dancing in the streets all over the Emerald Isle, bedad!

At this time when disaster threatened and the prospect looked black, J. C. happened to hear that the girls in the chorus line at the Follies Bergiere in Paris dance with nothing but fig leaves for raiment and that these fig leaves are not supported by any visible means such as G strings. Obviously they must be supported by some kind of adhesive. Immediately Crosby conceived a new market for Fasteeth. Off they went to Paris, drawing on the home office for an extension of the clip sheet of course, and we next find Monsieur Crosby and his scientific advisor, deeply engrossed in market research in the front seat of the Follies. Bald Headed Row they call it in this country. The French have a different name for it. Seven shows in as many days convinced our heros that the time was ripe for all French women to wear fig leaves, stuck on of course with Fasteeth.

Intensive field investigation mostly in the vicinity of Pig Alley in the Montmarte did not yield promising results as far as Fasteeth was concerned. The Frenchwomen liked the idea of the fig leaves all right but the adhesive, Fasteeth, mais non! J. Crosby slipped there. He should have changed the name of the product. Or maybe his French was lousy.

At this juncture the future was dark indeed. Two attempts to overwhelm foreign markets had failed. Lesser men would have given up. Anyway the expense sheet still had some white space left in it. And who the hell would go back to Binghamton after having been in Paris? At this juncture Germann told his boss, M'sieu Coughlin, about the houris who dance in the courts of the Far East. In this country we spell the name with a "w". These dancing girls according to Germann wear conical bronze cups, called in Arabic, "bubi cups." Since these cups, like the French fig leaves, are supported by no apparent means, the possibility of a market in the Far East for Fasteeth was immediately obvious.

Next we find our world travelers in the tent of Abdullah Hajiz, Shiek of Samarcand and points East. In order to conceal his real identity J. Crosby is wearing a burnous and a turban and has changed his name to Felim Bey Bey. He is sitting cross-legged on a diran with his turban slightly askew over his monocle. Behind him stands a gigantic Nubian slave languidly waving an ostrich feather fan above his head. Beside him on either side are a couple of slim, sloe eyed houris dressed in the conventional dancing garb, which means nothing from the waist up but a couple of ornate bronze or gold cups. Felim Bey Bey is having some difficulty holding his monocle in place. (When you wear one of those things you are not supposed to roll your eyes.) The market research is proceeding very satisfactorily.

On the floor crouched before Felim is Ali Baba Boo the only red headed fakir in the entire East. He is blowing a long trumpet at a basket out of which rears a waving snake's head. The snake looks interested, never having seen a red headed fakir before. The fakir is not tooting with any marked degree of enthusiasm, however, he is leaning backward somewhat distastefully, and, as the snake inches out of the basket the fakir inches back on his backside. He looks ready to drop the trumpet and run like hell. It is clear from his expression that the fakir wishes he were back in Binghamton, for this reluctant snake charmer is none other than our scientific adventurer, Dr. Don Germann. Don doesn't like snakes ever since in Paris the week before, he'd seen some pink ones with green, bushy tails. As ever, Felim Bey Bey demonstrates his utter impartiality by splitting fifty fifty. He gets the houris and Don gets the snake. Sales people were ever thus.

A line from Don's report to the home office indicates the scientific detatchment with which the market survey was carried on. In describing the bubi cups, Don's report states, "The said cups are conical in form somewhat ovate in cross section and very sharply pointed at the ends," The probing finger of science! It served him right. From Don's report it is evident that the two investigators didn't sell much Fasteeth, but they are going to bring out a new product, Fastfeet, for World travelers.

At long length Felim Bey Bey and Ali Baba Boo wound up in Bombay whence they sent me a card—from one of the museums of all places! They sounded tired.

Both gentlemen are safely back home again in Binghamton. Don's gone back to his test tubes. Crosby is pensively staring out of the window. John Clark and Carleton Cleveland, both old advertising men, are finishing up their book, "The Art of Fiction Writing." It's a very practical book since its material was derived from a study of the swindle sheet turned in by Lord Plushbottom and that red headed test tube twiddler, Don Germann.

Dust Collection

The collection of dust from operations such as face powder mixing and filling, tablet granulating, compressing and coating is a difficult and expensive procedure if it is done completely. However it is done, a lot of air must be moved rapidly while the dust is still suspended in the air. Most dust collection systems are inadequate because they provide no means of increasing the volume and velocity of the air at the point of the greatest dust concentration. Often these points occur intermittently as when a face powder mixer is loaded or dry powder is dusted on tablets revolving in a coating pan. At such points sudden displacement of the air in the operating container or machine creates a momentary "gust" of dust laden air.

Various means of mechanically containing such gusts have been employed such as the provision of closable

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John W. Stiles, General Manager

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door or dust curtains. Sometimes, when sequential operations must rapidly be performed, mechanical closures, however rapid they may be, interfere with the work of the operator. If the dust collection system is provided with sufficient volume and velocity of air to control the "gust" condition, a terrific overload is placed upon the air conditioning or heating system. This is particularly true if for any reason the dust cannot be filtered out of the air stream so that the air can be recirculated. A nice problem of balance is involved too, for, in handling expensive materials, excessive exhaust air will suck too much material out of the equipment. I know of a case in a chemical plant where the dust collector was allowed to operate during a mixing cycle with the result that the entire batch disappeared through the dust collection system! I've known cases where even heavy objects like tablets were sucked out of coating pans. Although a lot of work is being done, our industry has not licked the problem yet. Actually it is not one problem but a series of problems for each condition is different.

In the chemical industry where poisonous dusts are handled and hence where all dust must be collected absolutely, reliance is placed upon high velocity down-draught hoppers and the effect on the plant heat load of the enormous amount of air exhausted is disregarded. When humidity can be ignored water curtains or showers are employed. Sometimes displaced air and dust is forced to travel to collectors by means of a blast of air from louvres located behind the workmen. This arrangement blows the dust away from the workmen so that they can breathe none of it. In such systems the exhaust ducts must handle an enormous amount of air. They must maintain a negative pressure, since they must pick not only all the dust laden air blown into the intake vents, but some of the surrounding room air as well. In the automotive industry paint spray booths (in reality dust collectors) offer an interesting example of the use of positive air streams in keeping the paint laden air from the spray guns away from the workers. Air is blown through louvres located behind the workmen in such a way that the spray exhaust is blown away from them and is trapped by a curtain of falling water located behind the object being sprayed.

In textile mills and in some chemical plants dealing with light dusts an adaptation of the paint spray booth is employed. The equipment is partitioned off in cells or air locks. One wall is perforated or slotted and is used as a pressure duct. The opposite wall beyond the equipment likewise is provided with openings or louvres and the air is exhausted through them. In other words one wall is a pressure wall the other a negative wall. Obviously all "outside" air is blocked off by the partitions, the total air for the partitioned area being delivered by the pressure wall. I have seen the system in textile mills where the lint dust is very light and it works very well. Where dusts are heavy and likely to precipitate fast or are irritating or poisonous and must be confined to the original receptacle, such a system will not work. It requires a lot of air to operate it even under the best conditions.

It may be remarked parenthetically that any dust collection system will work better when it is free from interference of stray air currents. I have seen mixers fitted with dust shrouds located near open windows. No dust collection system will work under such conditions. You can't compete with Nature in moving air around.

Instead of depending upon suction entirely however a better job can be done when directed air under pressure also is used. Once I conceived a coating pan collar, half of which was fitting with collection ports; the other half with pressure ports. The idea being that a positive air curtain would be forced across the face of the pan to direct gusts of dust into the intake ports. I have made similar adaptations to three sided mixer hoods.

The difficulty usually is that management will not spend the dough to do a perfect dust collection job unless poisonous or irritating dusts force it to. The ideal system would give the operator full control over volume and velocity where "gust" conditions occur intermittently. The conventional system operating from a single fan cannot provide that. About all the control an operator can exercise with conventional systems is to regulate dampers and that is not enough. Someday some bright bird will come along with inexpensive unit systems which can be adapted and adjusted to suit localized dust problems.

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Transwrapping

The Transparent Wrap Machine Corp., of Hasbrouck Heights, N. J., has announced a new design modification that permits all six models of their Transwrap automatic packaging machine to package with roll polyethylene film.

According to Mr. Walter Zwoyer, president, no change was required in the basic design of the Transwrap machines. The new modification assemblies will be made available for all current and early model Transwraps—as well as being incorporated in the newer machines now in production. The polyethylene will be handled in rolls 4″ to 11″ wide, gauges .0015 to .020—either plain or printed in single or multi-color.

Transwrap machines, which package powder and granular forms, free-flowing solids, liquids and semi-liquids will now offer the packaging industry the full advantages of automatic, high-speed, heat-sealing of this chemically inert, waterproof, moisture-vaporproof, packaging film. Package sizes will range from 1¼″ x 1½″ minimum to 5¼″ x 13″ maximum and from 5 cu. in. to 80 cul in. by volume.

Transwrap feature three types of feed: volumetric,

and now . . . the NEW 80-160

Self-Liquidating KIEFER ENDWELD TUBE FILLER and SEALER

The new 80-160 Endweld . . . really a modern packaging marvel . . . has no equal. Requires far less tube length . . . Fills liquids, packs pastes solidly into the tubes.

First it cleans the tubes, collecting the dust—then neatly and accurately does the filling—WELDS the tube ends into the trimmest, most dependable closure.

Fold and corrugation follow, if desired.

Positive metering pump with finely adjustable fill velocity.

Very easy to regulate the filling volume . . . rapid tube size changeover. It counts the tubes, so you may quickly reckon the dividends it pays you each day—through the saving of tube length because of the unique closure besides its all-over technique.

Completely automatic, semi-automatic, hand-fed equipment to clean, fill, close, convey jars, bottles, tins, collapsible tubes.

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auger and liquid. This permits full automatic packaging of food products, chemicals, metals, toys, novelties, etc.

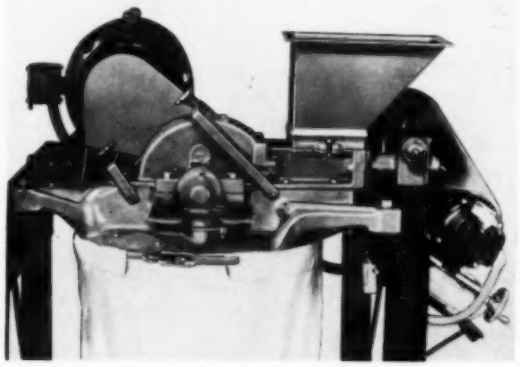
Pulva-Sizer

For grinding and blending of drugs, cosmetics, pharmaceuticals and soaps the new Model B Pulva-Sizer is highly efficient, compact and dustless in operation. It is manufactured by the recently formed Pulva Corporation, 550 High Street, Perth Amboy, New Jersey. Drug milling of barks, roots, leaves, etc., calls for granulating, shredding or fine grinding and the Pulva-Sizer will produce the type of grind desired on most of these materials.

Face powders and rouge mixtures are handled most efficiently producing a fine, thoroughly dispersed finished product without color or white streaks. The process consists simply of pre-mixing all of the materials used in making the finished powder or rouge and running the mixture through the Pulva-Sizer. The product from the Pulva-Sizer is finished and ready for packaging.

A wide range of pharmaceutical products can be advantageously handled with the Pulva-Sizer—from fine grinding to granulating and also wet milling. Available in stainless steel and easily cleaned, one unit may be used for many different materials.

Controlling particle size distribution for making a uniform fine granulation makes the Pulva-Sizer an ideal mill for soap powders. Capacities are high and the dustless operation is highly important on this type



application. Fine grinding or powdering of soap can be accomplished if the fat and moisture content are within required limits.

The Pulva-Sizer is a precision built impact or swing hammer type pulverizer with twin screws for feeding unground material directly to the face of the hammers. The feed screws are available in three diameters to handle a wide range of material from free flowing powders to pieces up to approximately 3″ size.

The Pulva-Sizer is sturdily built for 24 hour per day service with all parts precision machined and interchangeable. The rotor is finely balanced to eliminate vibration even at highest speeds. The unit is furnished complete with all drives, motors, starters and wiring as shown in accompanying illustration. Many exclusive features are incorporated in its design which are described in literature now being prepared and available soon.

Electric Tiering Truck

The Lyon-Raymond Corporation, 14169 Madison Street, Greene, N. Y. recently announced their new electric tiering truck. An addition to their line is the Telescopic Straddle Type.

The illustration shows this model of Lyon-Raymond SpaceMaker operating in the conventional wide aisle placing an additional row of pallet loads in this wide aisle. This gives additional storage space by narrowing the aisle width by the length of the pallet load. This grocery warehouse was able to relocate their aisles reducing their aisle width from 10½ ft. to 6 ft.

This model SpaceMaker can be furnished to handle any standard size two-faced pallet. In this telescopic model the forks elevate to 130″.

The power unit assembly containing the drive and elevating motors, battery, etc., is interchangeable on all types of the company's Electric Tiering Trucks whether for skid platforms or single and double faced pallets. This power unit assembly on the telescopic model is only 29″ long and 27″ long on the non-telescopic. The over-all length of the loaded truck is only that amount more than the load length.

This shortness combined with the extreme maneuverability of the SpaceMaker makes possible right angle stacking in aisles narrower than the over-all length of the truck and the load.

The offset drive with the stabilizing knee-action caster gives what might be called "cam pattern steering" and actually exaggerates the shortness of the truck. For instance, the SpaceMaker with this single wheel offset steer will stack from a narrower aisle than a truck—if it were possible to design one—having suspended forks and automotive steer with the same over-all length.

The skid type of SpaceMaker can tier at right angle a skid load 32″ wide by 40″ long in a 60″ wide aisle, notwithstanding the over-all length of the truck and load is 7″ longer than the aisle width. Pallet loads can be tiered in comparably narrow aisles.

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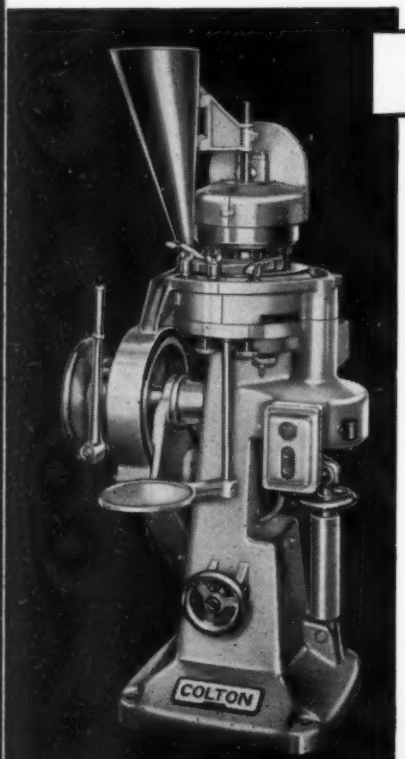
Four new units for the efficient and economical production of tablets.

1 • GRANULATOR

2 • DRYING OVEN

1 • New Colton No. 44 Twin Rotor Granulator has double the screen area plus continuous rotary operation, thereby giving 2½ times the capacity of ordinary, oscillating granulators. Delivers to trays, drums, bags. Dustproof. Accessible. Quick-change screens and rotors. Standard or stainless steel.

2 • Model 1030 takes 10 trays; 2030 takes 20 trays, 30″ x 30″ x 1″. Double steel shell, fully insulated with rock wool. Positive, uniform circulation of air from high-speed fan. Dampered inlet and outlet. All controls outside. Safety latches. Electric, gas or steam heat.



3 • ROTARY TABLET PRESS

New Colton No. 216 Rotary Tablet Press makes up to 800 tablets a minute; maximum diameter ⅝″; maximum depth of fill 7/16″; maximum pressure 6000 lbs.; 16 punches and dies, easily changed. Variable speed drive; standard 1 HP motor. Fast, accurate, dustproof.

4 • COATING *and* POLISHING STAND

For pans up to 30″, new Colton No. 6; over 30″, new Colton No. 6A Coating Stand. Driven direct from motor through gear reducer; no belts; no slippage under load. Shafts mounted on anti-friction bearings; gears completely enclosed, running in oil. Motors ¾ HP and 1 HP polyphase.

Write for literature on these and other Colton pharmaceutical machines and name of nearest Colton field office.

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Carton Tucker

William B. Sanford Inc., New York 1, N. Y., Sales and Service Agents, recently announced the Neomax Carton Tucker, which takes a new approach to the problem of packaging in small, tuck-end cartons.

Designed for easy size changes, this machine will double or treble the output of the one operator required as compared with completely manual cartoning. It is expected the Carton Tucker will find widespread application in Drug, Pharmaceutical, Cosmetic, Chemical and Food Packaging Plants.

The Neomax Carton Tucker is designed and built by the Engineering Division of Bristol Myers Company, who developed this versatile machine for use in their overseas plants for packaging their Ipana Tooth Paste, Ingrams Shaving Cream, Mum, Sal Hepatica and Vitalis.

Automatic Discing

Manufacturers of cosmetic creams who follow the practice of dropping a disc on the surface of their filled cream jars will be interested in an automatic machine especially designed for the purpose by Carroll Engineering Co., Westminster, Md. This machine automatically punches a disc from a paper tape and deposits same on the surface of filled cream jars travelling through it.

Filler-Labeler

An automatic rotary vacuum filling machine which labels as it fills has been introduced by Biner Siegrist Machinery Co. 1101 N. Main, Los Angeles 12. The unit is capable of an output speed of 60 containers a minute. This unit was developed for wineries primarily where large containers are the rule and where precision label spotting is not an important requirement as it is in the drug and cosmetic industry.

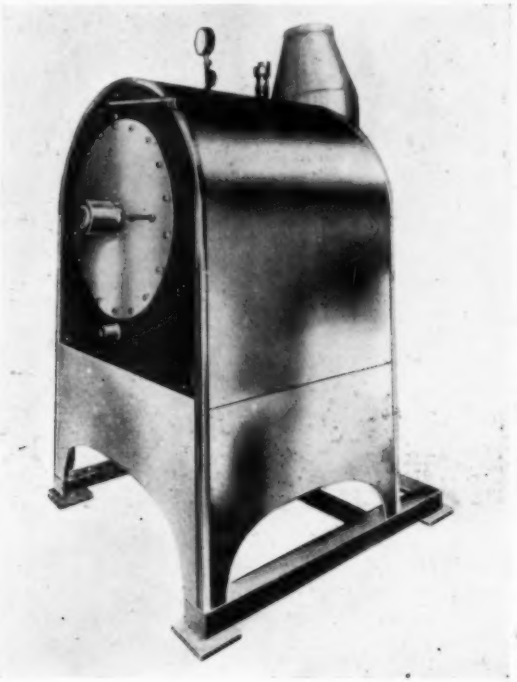
Small Case Sealer

ABC Packaging Machine Corp. Quincy Ill. invites the attention of small manufacturers to their semi-automatic case compression unit. This machine does not require adjustment for cases of varying size. The operator applies glue to the flaps of the cases just as they come; the machine applies the squeeze.

Bowen Stabilizer

Bowen Engineering, Inc., North Branch, New Jersey, announces the addition of a new piece of equipment to be known as the "Stabilizer." The Stabilizer compliments the Bowen Spray Dryer line. It is used for continuous non-fouling evaporation, for continuous rapid concentration of thin solutions of heat-sensitive materials and for bringing concentrated syrups to higher degrees of concentration.

The Stabilizer has been field tested for several years in the concentration of a number of materials which



ordinarily have a tendency to foul heated surfaces or develope operational hazards, and has proved highly efficient.

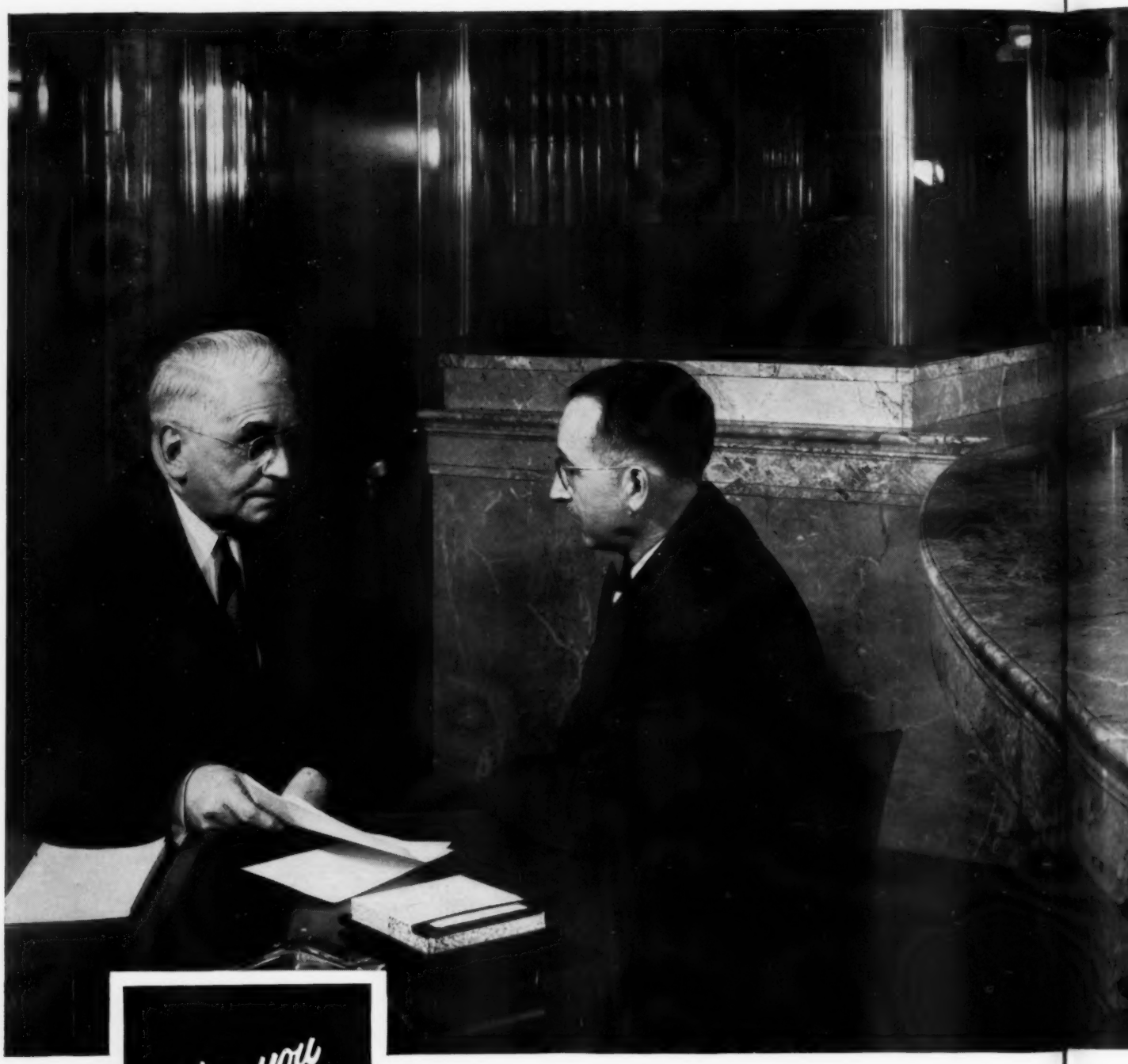
The unit requires only a limited floor area and can be operated with low labor expenses.

The body of the Stabilizer is a code-welded insulated steel jacket. The inner wall is a horizontal cylinder against which a rotor arm is carried on a centrally located shaft, driven at low speed. Operating steam pressure may be from 75 to 100 p.s.i.g.

Thin material is delivered through a feed pipe at one end of the cylinder and a discharge pipe removes the concentrate at the opposite end while evaporated vapor leaves through a stack. The action of the patented specially designed rotor forces the liquid to present a very large surface area for heating and vapor release.

The short treatment time, a matter of minutes, permits retention without damage, of the heat-sensitive components of materials being handled.

The Stabilizer is available in six sizes with an evaporation rate from 600 to 12,000 pounds per hour. Can be had in mild or copper-bearing steel, or stainless steel, at all liquid contact points.



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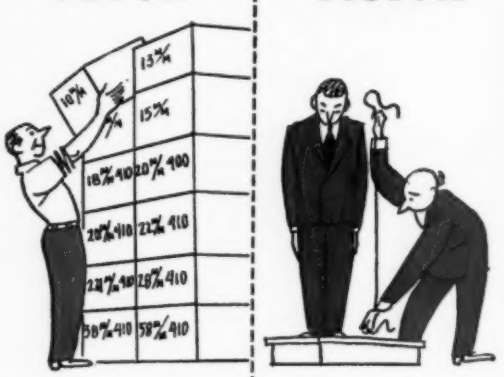

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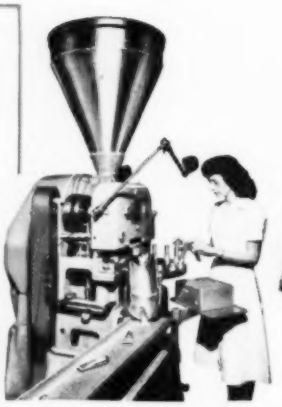

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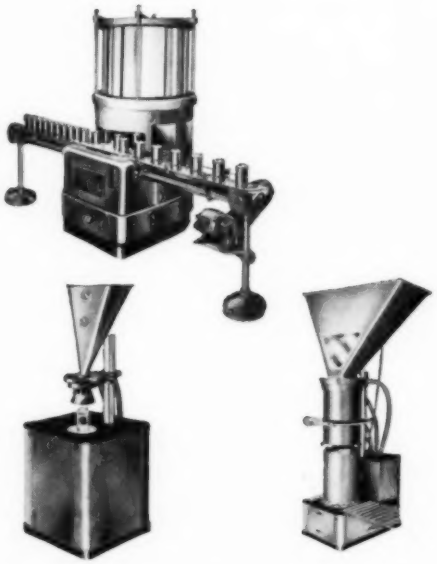

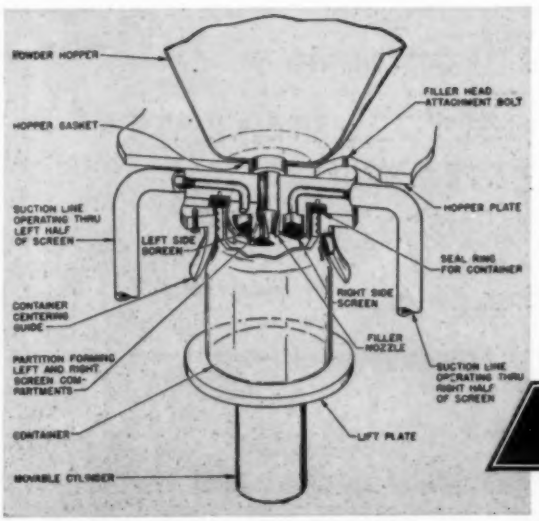

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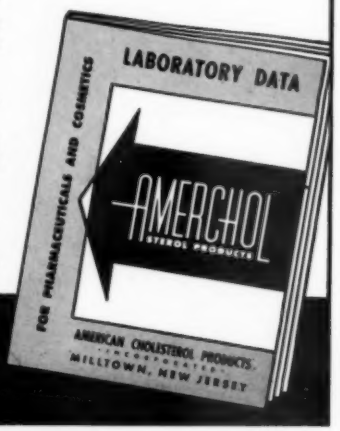

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PATENT THOUGHTS AND TRENDS

*by Thomas Cifelli, Jr., Patent Attorney**

U. S. Supreme Court Hands Down Decisions Favoring Patent Owners

To those who have engaged in the widespread and rather fashionable pastime of singing the swan song of patents by repeating with authority such profound statements as "a patent is merely a license to sue" or "a patent is good until the Supreme Court lays its hand on it" it will no doubt come as a surprise to learn that the U. S. Supreme Court in its two most recent decisions affecting patents has gone so far, in upholding the rights of the patent owners, as to hold that the use of manganese silicate infringes a claim which calls for silicates of alkaline earth metals; and in the second case, a royalty provision in a patent license providing for payment of royalties on all radio receivers intended for home use made by the licensee, whether the receivers embodied any of the patented features, was held legal.

Regular readers of this department, however, will probably not be surprised at all. In this connection, as recently as in the January 1950 issue, it was stated that "a meritorious invention properly described and claimed in a patent will still be protected by the courts and "those who may have shied away at expending sums for research because of their fear that the results of the research could not be effectively protected—they can take heart."

Indeed, the reaction of many patent attorneys with whom the last two Supreme Court decisions have been discussed is that the Supreme Court may have gone a little too far in favor of the patent owner. If so, this is merely another example of the pendulum swinging in another direction, this time perhaps a little too far to the right.

Electric Welding Process Upheld

The case in which the U. S. Supreme Court held that manganese silicate is the equivalent of an alkaline earth silicate was that of *Graver Tank & Manufacturing Co., Inc., et al* v. *Linde Air Products Company*, reported at 85 USPQ 328. The original decision was handed down last year and was reported in some detail in the April 1949 issue of This Journal. In the first decision the Supreme Court held that four of the claims dealing with fluxes for use in connection with an electric welding process were valid.

The second or more recent decision considered only the question of infringement, and more specifically, whether or not the use of manganese silicate in the Lincolnweld 660 composition was an infringement of the claims which called for alkaline earth silicates.

In view of the Graver decision it is quite obvious that the question of what is an equivalent in connection with chemical patents is a very difficult one. Certainly, anyone who merely follows the language of the claims in coming to his decisions is going to be in for a surprise. Put another way, patent attorneys are going to think more than twice before taking the position that the accused process or composition does not infringe the claims of a patent, as the Graver decision appears to broaden the scope of chemical claims.

Mr. Justice Black and Mr. Justice Douglas dissented, Mr. Justice Black pointing out that hereafter a manufacturer cannot rely on what the language of a patent claims but he must be able, at the peril of heavy infringement damages, to forecast how far a court relatively unversed in a particular technological field will expand the claim's language after considering the testimony of experts in that field.

Royalty Provision Held Valid

The second recent U. S. Supreme Court case previously referred to is that of *Automatic Radio Mfg. Co., Inc.* v. *Haseltine Research, Inc.*, reported at 85 USPQ 378. In that case Haseltine issued non-exclusive patent licenses covering a group of some 570 patents and 200 pending applications, all related to the manufacture of radio braodcasting apparatus. Haseltine's policy was to license any and all responsible manufacturers of radio apparatus at a royalty rate which for many years was about 1 per cent. Automatic manufactured radio apparatus, in particular radio broadcasting receivers.

By the terms of the license Automatic acquired permission to use, in the manufacture of its "home" products, any or all of the patents which Haseltine held or to which Haseltine might acquire rights. Automatic was not however obligated to use Haseltine's patents in the manufacture of its products. For this license, Automatic agreed to pay Haseltine royalties based upon a small percentage of Automatic's selling price of complete radio broadcasting receivers, and in any event a minimum of $10,000 per year.

The Supreme Court had to decide whether a misuse of patents was involved and whether Automatic would have the right to contest the validity of the licensed patent.

As regards the misuse angle, Automatic contended that it is a misuse of patents to require it to pay royalties based on its sales even though none of the patents may be used. In this contention Automatic relied upon the so-called "tie-in" cases which uniformly condemn schemes requiring the purchase of unpatented goods for use with patented apparatus or processes, prohibiting production or sale of competing goods, and conditioning the granting of a license under one patent upon the acceptance of another and different license.

The Supreme Court pointed out that Haseltine does not manufacture or sell goods and doesn't require the purchase of anything, nor did it attempt to prohibit Automatic from manufacturing or selling any type of apparatus. Finally, the Supreme Court in upholding the legality of the royalty provision said that it does not create another monopoly nor any restraint of competition beyond the legitimate grant of the patent. Since it would not be unlawful to pay a

*Gaylor, Cifelli & Jurick, Newark, N. J.

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Spectrophotometric studies evaluated Solprotex as the most nearly ideal sunscreen. Rechecked solar radiation studies proved that Solprotex was effective under normal conditions of use. Insoluble in water, it resists perspiration. Solprotex screens out burning rays and permits healthy tanning rays to pass.

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Animal experiments in the widest range were used to determine the physiologic harmlessness of Solprotex. Pathological examination of the tissue and organs of the animals tested showed no pathological significances.

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Competent dermatologists at a well-known university clinic tested and examined several hundred patients to assure safety in human use.

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Solprotex has been tested on various human skin types at the sea, beach, lake, pools, and in the snow to determine both its ease of application and protection against sunburn.

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Only a 2½% concentration of Solprotex is required. Solprotex lends itself to wide cosmetic formulations such as oils, creams, lotions, and alcoholic preparations. Formulation suggestions are available. These formulae have been tested for physiological safety.

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fixed sum for the privilege to use the patents, the Court felt that it was not unlawful to provide a variable consideration measured by a percentage of Automatic's sales for the same privilege.

On the question of whether Automatic had the right to raise the invalidity of the patent, the Surpeme Court held that no such right existed, since there was no price-fixing involved.

Recent patents believed to be of sufficient interest to note here deal with a vanillin purification process, dimethylamino vitamin A, 2,4,5-trichlorophenol esters, a combined soap and synthetic detergent bar, new N-containing detergents and a deodorant composition.

Vanillin Purification Process

Collis C. Bryan obtained U. S. 2,506,-540, assigned to Monsanto, on a vanillin purification process involving the distillation of crude vanillin under a moderate vacuum in the presence of a non-reactive, substantially non-solvent, aliphatic hydrocarbon or chloro-aliphatic hydrocarbon capable of distilling with the vanillin below a temperature which is injurious to vanillin.

The advantages of the Bryan process are said to be (1) substantially all the vanillin can be distilled over at a low enough temperature so as to eliminate degradation; (2) almost all the impurities are said to be left behind in the distilling flask although if the crude is distilled alone without any distilling aid objectionable amounts of impurities also come over in the vapors; and (3) the vanillin can be readily separated from the distilling aid and purified for sale.

Dimethylamino Vitamin A

Professor Milas has obtained yet another patent (U. S. 2,507,802) involving a process for making vitamin A, the patent like Professor Milas's previous ones having been assigned to the Research Corporation.

U. S. 2,507,802 covers as a new compound the dimethylamino vitamin A and a process for making the compound.

2,4,5-Trichlorophenol Esters

Dow Chemical has obtained two patents (2,508,334 and 2,508,335) dealing with 2,4,5-trichlorophenol esters. U. S. 2,508,334 covers the 2,4,5-trichlorophenyl esters of certain haloaliphatic acids. U. S. 2,508, 335 relates to fungicidal compositions containing 2,4,5-trichlorophenyl chloroacetate.

On January 4, 1949, Drs. Cade and Gump were granted U. S. patent 2,457,-805, covering aliphatic esters of 2,4,5-trichlorophenol, but the Cade and Gump patent was not cited against either of the Dow patents.

Colgate Detergents

Colgate recently obtained three patents dealing with detergents. The patents are U. S. 2,508,578, U. S. 2,508,-652 and U. S. 2,508,653.

Specifically, U. S. 2,508,578 deals with a combined soap and synthetic detergent bar. One half of the bar is soap and the other half is a synthetic detergent, the two halves being physically joined together during processing.

In the words of the patent the "invention consists in providing the user with a toilet bar which, when used in the conventional manner, will be satisfactory and will excel ordinary soap in lather mildness, rinsing, and cleansing properties and, when used so as to get only synthetic detergent in the lather, or only soap in the lather, will please the discriminating user who understands the special properties of each detergent."

U. S. 2,508,652 and U. S. 2,508,653 disclose what are said to be excellent foaming, deterging, wetting and lime-soap dispersing agents. U. S. 2,508,652 deals with compounds which are characterized by the presence in the molecule of (a) a long-chain aliphatic radical of from 6 to 24 carbon atoms, (b) one or more alkoxy groups, (c) the ring structure of the heterocyclic nitrogen compound piperazine, and (d) a short-chain aliphatic radical of from one to three carbon atoms.

U. S. 2,508,653 deals with compounds which are characterized by the presence in the molecule of (a) the ring structure of the heterocyclic nitrogen compound piperazine, (b) a long-chain aliphatic radical of from 6 to 24 carbon atoms and (c) two or more alkoxy groups of which at least one is attached to each of the two hetero-nitrogen atoms.

Dichloro Aluminum Aminoacetate Hydrate

A new chemical having deodorant properties is covered by U. S. 2,508,787 issued to Grote and Holbert and assigned to the Chattanooga Medicine Company.

X-Ray Contrast Agents

Schering's success in the market place and in the law courts on its X-ray contrast media are brought to mind by a recent patent, U. S. 2,508,418 issued to Strain and Dec and assigned to Eli Lilly. The Lilly patent covers iodinated phthalimide derivatives, some examples bearing the formidable names of 3,6-di idophthalimidomethane, alpha-(3,4,6-triiodophthalimido) - gamma - methoxybutane, 3,4,5,6-tetraiodophthalimidobutene-2, and 3,4,6-triiodo-phthalimido-beta-methoxypropane.

RECENT PATENTS

2,500,921—**A. Goth — Bismuth-Aspergillic acid Complex.**

2,501,014—**E. R. Squibb—Method of obtaining Highly-purified Streptomycin Acid Addition Salts.**

2,501,026—W. R. Warner & Co.—Epoxides.

2,501,455—Lankenau Hospital—3,6-Bis Dichloroethyl-2,5-Diketopiperazines.

2,501,551—**W. Taub — 5-Cycloheptenyl-5-Ethyl Barbituric Acid.**

2,501,649—**Upjohn—Benzotriazoles.**

2,501,892—**Ciba Pharm. Prods.—Condensation Product of 6-Sulfanilamido-3-Methyl-Pyridazine with Formaldehyde.**

2,502,151—**Soc. Usines Chim. Rhone-Poulenc—Dimethylaminoalkyl amino Anti-Histamines.**

2,502,264—**U. S. A.—Quinoline Anti-Malarials.**

2,502,324,5—**Armour & Co.—Diethylstilbestrol Derivatives.**

2,502,421-427—**Parke, Davis—Thiophine Derivatives, Antibiotics and Intermediates Therefor.**

2,502,451—**Ward, Bleukinsop & Co. —Amino-alkyl Esters of Diphenylamine 2-Monocarboxylic Acids.**

2,502,868-70—**National Drug—Bicotinyl Salicylic and Gentisic Acids, and 7-Methyl Homolog of Folic Acid.**

2,503,059—**Ciba — 2-(N:N-Diphenyl-Aminomethyl) Imidazolines.**

2,503,214-6—**Shell Development Co. —Penicillin Purification.**

2,503,296—**Schering—Iodinated Hydroxyaryl-Aryloxy-Aliphatic Acids.**

2,503,650—**H. A. Abramson—Urea Stabilized Epinephrine Mist for Treatment of Asthma.**

2,503,652—**Burroughs Wellcome—N-Phenethyl - Beta - Alanine Derivatives.**

2,503,820—**Geigy-N'-Isopropoxybenzoyl Sulfanilamide.**

2,504,107—**Purdue Research Foundation—Aluminum Methionate.**

2,504.161 — **O.S.R.D.—Para-hydroxy Penicillin G Derivatives.**

2,504,182—**Bristol Labs.—Amine Salts of Penicillin.**

2,504,382—**Dupont—Miticidal Compositions comprising a 2,2-bis (para-alkoxyphenyl)-propane.**

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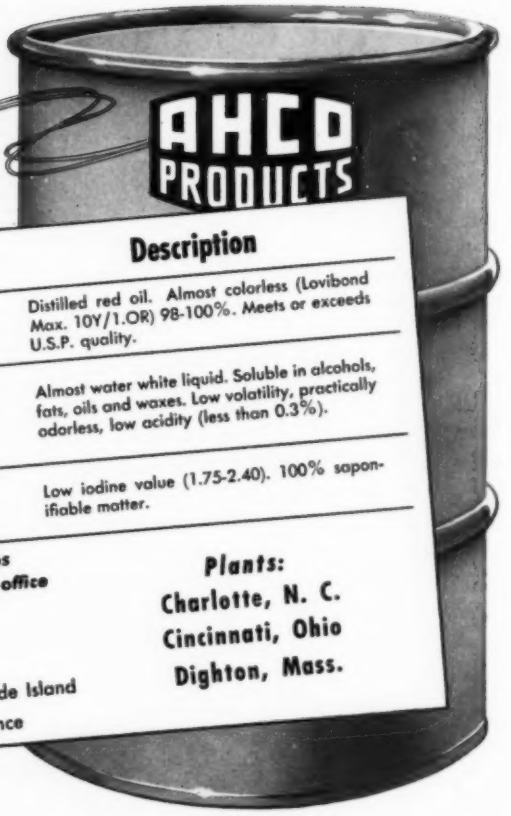

Product	Use	Description
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TRIPLE PRESSED STEARIC ACID	Cosmetics, Pharmaceuticals, Emulsifying Agents, Esters.	Low iodine value (1.75-2.40). 100% saponifiable matter.

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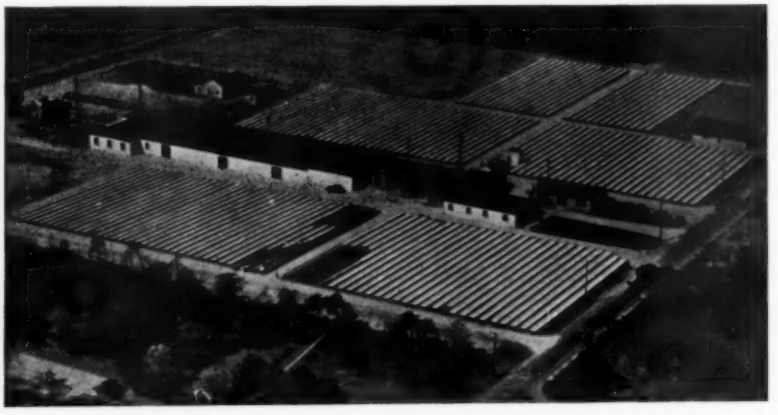

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YOUR TRADE-MARK RECORD

by John H. Graham
International Patent and Trade-Mark Consultant

How to Protect Your Valuable Trade-Mark Rights!

A decision has been recently published which brings forward an important point. Having obtained registration of a mark, the owner cannot just sit down. He must protect his valuable trade-mark rights.

Let us look at this decision to give us an idea of what is meant. The case is Haughton Elevator Co. versus Otis Elevator Co. The mark is the word "ESCALATOR." This was registered to Otis in 1900 and renewed in 1930. Haughton asked the Patent Office to cancel it. The Examiner's decision to cancel was appealed to the Commissioner. The appeal was affirmed by Assistant Commissioner Murphy. The following are the facts which were brought out.

The word "escalator" has become a descriptive name to both the general public and to engineers and architects and, to them, the term not only means a moving stairway made by Otis but rather means any moving stairway without reference or mention of the maker. It was held that, Otis "not only had not been successful in preventing the use of the term "escalator" from becoming a common descriptive name but, in its use as a generic term, has given assent to such use." In plainer English this is what Otis had done to destroy their ownership: They had used the word "escalator" in a number of their own patents as a description and not as an indication of origin. They had used the word "escalators" in advertising matter which appeared in magazines. For example, they ran an advertisement in 1946 reading in part, "THE MEANING OF THE OTIS TRADE-MARK. To the millions of daily passengers on Otis elevators and escalators, the Otis trade-mark or name plate means safe, convenient, energy-saving transportation." From this obviously "escalator" and "elevator" are used in the same way as descriptive of the device.

Furthermore, two responsible men representing Otis were on a committee which prepared "Standard Safety Code for Elevators, Dumb-waiters and Escalators, and in the code "escalator" was defined as a moving inclined continuous stairway or runway. Otis made no protest against such generic or descriptive usage of their trade-mark "escalator."

So, as stated above, the mark was ordered cancelled. Whether this will be taken to a higher Court I do not know. But the facts speak for themselves.

The more important the mark is to you, the more vigilance you must guard it with.

It is extremely bad when the acts of misuse of the mark are done by the owner of that mark as in the case above.

Dictionaries are extraordinarily bad in such misuse. I have before me a Dictionary printed in England in 1930. It was bought especially to fight the British Trade-mark Examiner who had refused the word "comptometer" to Felt and Tarrant for calculative machines on the ground that it appeared in this particular dictionary. Here it is! "Comptometer, an automatic calculating machine."

I've just looked up "escalator" in there too—"escalator, a moving staircase."

Lots of people still call a phonograph a "Victrola" particularly if it is a mechanical model yet "Victrola" is one of RCA—Victors' oldest marks.

It is not to be expected that every owner of a trade-mark should buy up every dictionary as it comes off the press, here and abroad, and check every mark he has against it. Nor can he put a corps of private investigators to work eavesdropping on John Q. Public.

But constant vigilance on all advertising copy and all proposals and sales copy is necessary if your rights are to be protected. Granted that you have to sue someone or they sue you before these questions come up, but it is just when the mark is valuable enough to cause a suit that you need a past cloak of protection.

Some "Configuration of Goods" Trade-Marks!

The 1946 Trade-mark Act (Lanham) did provide for registration of the configuration of the goods as long as same could serve as a mark. However, the Act then left us cold without definition of what a "configuration of goods" is.

A decision by Mr. Daniels, Assistant Commissioner, confirmed the Examiner's refusal to register such a trade-mark consisting of a seal beam headlight for locomotives.

The configuration was a new design of headlight having a circular plate on which two seal beam headlights are mounted one above the other each with an elliptical frame around it giving an effect of interposed small circles within a large circle, the small circles being enclosed by the frames. The trade-mark applicant argued that this effect was bizarre and striking and this was the test to be given when configuration or shape of the goods was being considered as a trade-mark.

However, Mr. Daniels completely disagreed with this view, considering the

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design to be conventional and more selected for utility than appearance.

It was felt that if the test was to be based on uniqueness, then the design must be so different, unique or bizarre that it was deliberately chosen to distinquish the goods and act to show origin of the goods.

The test actually would appear to be more one of whether the design had a function, namely was purely useful, or whether it was obviously ornamantal in its approach, even though it might also be useful.

OTHER DECISIONS of interest include the refusal of "NOCLAMP" for glues on the basis that the term is either descriptive or misdescriptive (Monsanto Chemical Co.).

Also, "DUZ" for soap (Proctor and Gamble) was held sufficient to stop "DUZ MOR" for louse powder for poultry, livestock and dogs since the goods were held to be sufficiently closely related to cause likelihood of confusion.

The following Trade-Marks were recently published in the Official Gazette of the United States Patent Office.

Acqua di Selva—51—B—568,411
Victor, S. R. L., Milan, Italy
Ser. Nov. 8, 1948 D. U. Oct. 3, 1946

Aeterna—22—R—569,724
S. R. Aktiebolag, Grastorp, Sweden
Ser. Dec. 1, 1948 D. U. Apr. 10, 1943

Americal-Aide—18—T—492,783
Morris & Son, DBA H. F. Morris Medicine Co., Bremen, Ga.
Ser. Dec. 6, 1945 D. U. March 6, 1945

Ammonite—51—K—574,643
Stanley Drug Products Inc., Portland, Ore.
Fer. Feb. 28, 1949 D. U. Apr. 1, 1948

Barbasol—51—D—580,547
The Barbasol Co., Indianapolis, Ind.
Ser. May 26, 1949 D. U. Nov. 9, 1927

B B—51—H—516,815
Hal Collins Co., Dallas, Texas
Ser. Feb. 3, 1947 D. U. Aug. 19, 1946

Beau Belle—51—B—574,684
Bourjois, Inc., N. Y., N. Y.
Ser. Mar. 1, 1949 D. U. Jan. 14, 1949

Beauty in The Morning—51—52—ABCDHK—560,787 (And Des.)
Universal Labs., Inc., East Orange, N. J.
Ser. July 1, 1948 D. U. June 4, 1948

Beauty Brew—52—A—576,180
F. A. Weaner, Assignor to Beauty Brew, Inc., Chicago, Ill.
Ser. March 26, 1949 D. U. Feb. 6, 1949

Behold—51—C—575,571
Colgate-Palmolive-Peet Co., Jersey City, N. J.
Ser. Mar. 17, 1949 D. U. Feb. 10, 1949

Ben-Tress—52—A—575,663
New York Hair Co., Inc., N. Y., N. Y.
Ser. Mar. 18, 1949 D. U. Mar. 1, 1949

Blue Coral—51—C—572,024
Dermetics, Inc., N. Y., N. Y.
Ser. Jan. 12, 1949 D. U. Dec. 6, 1948

Bon Soir Bug—VI—T—580,045
Bon Soir Bug Co., Inc., Opelousas, La.
Ser. June 7, 1949 D. U. May 3, 1949

Breck—51—ABCH—549,701
John H. Breck, Inc., Springfield, Mass.
Ser. Feb. 14, 1948 D. U. Feb. 4, 1931

Cheetah—51—BC—574,953
Consolidated Cosmetics Inc., Chicago, Ill.
Ser. Mar. 5, 1949 D. U. Feb. 11, 1949

Chic—Schick—22—R—525,808
Eversharp, Inc., Chicago, Ill.
Ser. Mar 28, 1946 D. U. Mar. 4, 1946

Cuir de Russie Chanel—51—B—566,-499
Chanel, Inc., N. Y., N. Y.
Ser. Oct. 6, 1948 D. U. March 1936

Danseuse—51—B—555,377
Cosmetics, Inc., Nashville, Tenn.
Ser. April 23, 1948 D. U. Sept. 22, 1943

Dazzle—52—A—573,051
J. L. Prescott Co., Passaic, N. J.
Ser. Jan. 29, 1949 D. U. June 29, 1948

Delaine—18—H—569,608
De Laine Products, Inc., Chicago, Ill.
Ser. Nov. 30, 1948 D. U. May 1947

Devex "T"—VI—T—548,890
Food Machinery & Chemical Corp., N. Y., N. Y.
Ser. Feb. 5, 1948 D. U. Jan. 17, 1948

Diorama—51—BCH—563,137
S. A. R. L. Parfums Christian Dior, Paris, France
Ser. Aug. 10, 1948 D. U. Aug. 7, 1947

D.O. Stick—51—D—571,552
J. S. Jacobs, DBA D.O. Co., N. Y., N. Y.
Ser. Jan. 3, 1949 D. U. Dec. 22, 1948

Double Treasure—51—C—513,054
Richard Hudnut, N. Y., N. Y.
Ser. Nov. 22, 1946 D. U. Sept. 25, 1946

Dynacide—VI—T—569,901 (And Des.)
The WM. M. Stieh & Co., Inc., Teaneck, N. J.
Ser. Dec. 3, 1948 D. U. Nov 15, 1948

Eny Meeny Miny Moe—51—B—575,-494 (And Des.)
The Sherton Co., Pittsburgh, Pa.
Ser. March 15, 1949 D. U. Nov. 12, 1947

Electric-Aire—44—W—572,418
Electric-Aire Engineering Corp., Chicago, Ill.
Ser. Jan. 19, 1949 D. U. Dec. 1, 1938

Emily Paige—51—BCEH—564,998
The Lander Co., Inc., N. Y., N. Y.
Ser. Sept. 11, 1948 D. U. Aug. 19, 1948

Ens-Zem—VI—T—532,364
Stauffer Chemical Co., San Francisco, Calif.
Ser. Aug. 25, 1947 D. U. Dec. 3, 1940

Epilogue—51—BC—569,721
S. A. Maurice Blanchet, Suresnes, France
Ser. Dec. 1, 1948 D. U. Oct. 30, 1940

Estee Lauder—51—BC—575,412
Estee Lauder, DBA Estee Lauder Cosmetic Co., N. Y., N. Y.
Ser. Mar. 14, 1949 D. U. Nov. 2, 1946

Fay Wood—51—ABC—537,645
Fay Wood Corp., N. Y., N. Y.
Ser. Oct. 11, 1947 D. U. Oct. 6, 1932

Flower Cluster—51—B—568,828
Avon Products Inc., N. Y., N. Y.
Ser. Nov. 16, 1948 D. U. Nov. 4, 1948

Formula—27—18—D—573,798
John Sexton & Co., Chicago, Ill.
Ser. Feb. 12, 1949 D. U. Jan. 18, 1949

Fragrinse—51—M—520,606
Helen Slater Ayers, DBA Fragrinse Co., N. Y., N. Y.
Ser. April 14, 1947 D. U. Feb. 1944

Friske Suds—52—A—515,893
F. H. Moore DBA Hilltop Labs., Minneapolis, Minn.
Ser. Jan. 17, 1947 D. U. July 1, 1944

Fuller—51—52—ACK—543,436
The Fuller Brush Co., Hartford, Conn.
Ser. Dec. 5, 1947 D. U. Oct. 1, 1923

Gleam—52—A—535,960
The Hennafoam Co., N. Y., N. Y.
Ser. Sept. 27, 1947 D. U. Sept. 1941

Gliss'n—52—A—493,346
Gliss'n Products Co., Inc., Chicago, Ill.
Ser. Dec. 15, 1945 D. U. Nov. 1, 1939

Groomette—44—W—569,165
J. C. MacCallum, DBA Coin-Operated Hair Dryer Co., St. Louis, Mo.
Ser. Nov. 20, 1948 D. U. Aug. 26, 1948

Hexamite—VI—T—578,012
Food Machinery & Chemical Corp., San Jose, Calif.
Ser. Apr. 30, 1949 D. U. March 2, 1949

Jasmin of the Nights—51—B—569,847
Haviland Labs. Inc., N. Y., N. Y.
Ser. Dec. 3, 1948 D. U. Nov. 1, 1948

Julyan—51—CH—546,801
Julyan L. Stevens, Boston, Mass.
Ser. Jan. 12, 1948 D. U. 1938

Kiltie Kit—51—C—564,926
Botany Mills, Inc., Passaic, N. J.
Ser. Sept. 10, 1948 D. U. Aug. 13, 1948

Kil-Zal—VI—T—522,471
National Labs., Parsons, Kansas
Ser. May 16, 1947 D. U. Aug. 15, 1937

KWIK—Trim—525,565
Marvel Comb Co., Chicago, Ill.
Ser. Aug. 13, 1948 D. U. Feb. 1, 1938

Liquid Lanolin—51—C—524,871—(And Des.)
Lanolin Plus Cosmetics Inc., Chicago, Ill.
Ser. Aug. 12, 1948 D. U. Aug. 12, 1942

Liquid Liptone — 51 — C — 566,100 (And Des.)
Princess Pat, Ltd., Chicago, Ill.
Ser. Sept. 29, 1948 D. U. July 16, 1927

Lord Adam—51—I—523,545
Ferdinand Ruggiero, Inc., Boston, Mass.
Ser. June 4, 1947 D. U. Nov. 22, 1946

Lusterbrite—52—A—568,707
Apothecaries Hall Co., Waterbury, Conn.
Ser. Nov. 13, 1948 D. U. Since 1942

Lykette—51—D—575,645
Iodent Chemical Co., Detroit, Mich.
Ser. May 18, 1949 D. U. March 7, 1949

Madame Lowery's Vine—51—H—524,868
RHODA S. LOWERY, Winston Salem, N. C.
Ser. July 20, 1948 D. U. July 16, 1948

Malaisie—51—BC—569,722
S. A. Maurice Blanchet, Suresnes, France
Ser. Dec. 1, 1948 D. U. Aug. 26, 1935

Marcel Rochas Paris—51—B—570,277
S. A. Parfums Marcel Rochas Paris, France Assignor 2 Parfums Rochas, N. Y., N. Y
Ser. Dec. 9, 1948 D. U. Aug. 3, 1948

Mennette—51—C—575,592
Mennen Co., Newark N. J.
Ser. Mar. 17, 1949 D. U. Dec. 22, 1924

Moisture Lock — 51 — C — 556,967 (And Des.)
Lambert Pharmacal Co., Wilmington, Del.
Ser. May 13, 1948 D. U. May 5, 1948

Nestle—44—W—569,286
The Nestle Le Mur Co., Meriden, Conn.
Ser. Nov. 23, 1948 D. U. Since 1930

Nu-Kurl—51—BCH—525,824
E. D. Jones, DBA Nu-Kurl Beauty College Durham, N. C.
Ser. Oct. 4, 1948 D. U. July 15, 1939

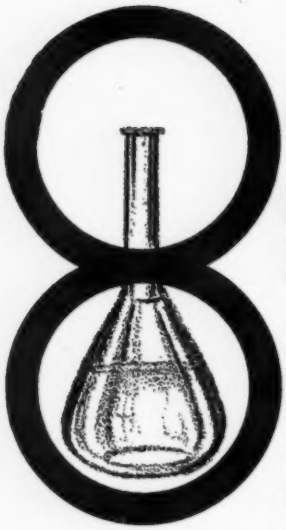
O-Cedar—VI—T—541,767
O-Cedar Corp., Chicago, Ill.
Ser. July 24, 1947 D. U. June 1, 1907

Onado—51—G—569,523
International Affiliated Corp., N. Y., N. Y.
Ser. Nov. 27, 1948 D. U. Oct. 29, 1948

O-So-Kleen—52—A—561,657
Coast Products Co., Los Angeles, Calif.
Ser: July 19, 1948 D. U. Feb. 8, 1941

Pedament—18—TM—574,594
(And Des.)
Scoles Bros., Columbus, Ohio
Ser. Feb. 26, 1949 D. U. Dec. 15, 1948

Penetreme—51—H—573,096
Raymond Labs., Inc., St. Paul, Minn.
Ser. Jan. 31, 1949 D. U. Aug. 27, 1948



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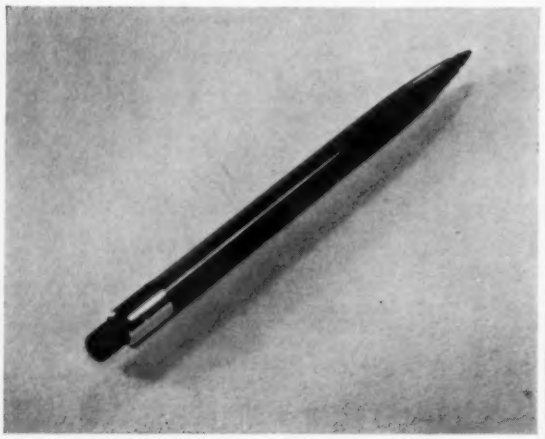

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Aqueous Dispersions of Vitamin A

In view of the physiological importance of vitamin A in aqueous media, C. J. Kern and T. Antoshkiw (*Ind. & Eng. Chem.* 42:709, 1950) have made a study of the stability and absorption of the nutritional factor in aqueous and oily media. The dispersing agent employed was the polyoxyalkylene derivative of sorbitan monolaurate, because most of the absorption studies with aqueous dispersions of A were carried out with this compound. The source of vitamin A employed was the nonsaponifiable fraction of mixed fish liver oils saponified by the method of Marcus (containing about 1,000,000 U.S.P. units of vitamin A per gram). The concentrate was diluted (to contain about 10,000 U.S.P. units per gram) with water containing 20 per cent of the dispersing agent, a suitable buffer, and in some cases 0.3 per cent of mixed tocopherols. The pH of these dispersions (which appear clear to the naked eye) ranged from 3 to 9. For comparison, the concentrate was diluted in the dispersing agent alone, in cottonseed oil containing 2 per cent tocopherols and 4 per cent lecithin (found to be the most effective antioxidant combination in previous studies) and in cottonseed oil alone.

Kern and Antoshkiw found that the stability of vitamin A in aqueous dispersions (the media contained 20 per cent of sorbitan monolaurate polyoxyalkylene derivative in water) was greatest at pH 5, 7, and 9 and somewhat less at pH 3 and 4. Tocopherols enhanced the stability at pH 3 and 4 but had the reverse effect (to a mild degree) at pH 7 and 9. The vitamin A mixed with the dispersing agent alone was less stable than in aqueous media. The stability at all conditions was superior to vitamin A concentrate, diluted to the same degree (10,000 U.S.P. units per gram) in cottonseed oil. This was true even in the presence of 2 per cent tocopherol and 4 per cent lecithin, which previous studies had shown to be the optimum antioxidant combination for oil. The stability was as good as or better than that shown by distilled vitamin A ester concentrate and distinctly superior to that shown by the distilled ester diluted in cottonseed oil. The absorption of vitamin A from aqueous media, as measured by vitamin A tolerances in humans, was better than that obtained with the same vitamin A diluted in oil. Tocopherol has no significant influence in this improvement.

Ointment for Ringworm

According to a note by G. L. Phillips (*Bull. Am. Soc. Hosp. Pharm.* 7:91, 1950) the following ointment has been recommended for treatment of all types of ringworm, especially that of the scalp.

Salicylic acid	**0.5 Gm.**
Iodine	**0.5 Gm.**
Sulfur, precipitated	**5.0 Gm.**
Triethanolamine	**6.0 Gm.**
Zinc undecylenate powder	**20.0 Gm.**
Undecylenic acid	**5.0 Gm.**
Washable base	**53.0 Gm.**

Dissolve the iodine in the triethanolamine. Triturate the powders with a small amount of the washable base and finally combine all ingredients and mix until smooth. Mill if required.

Tablet and Pill Disintegrating Agents

In *Pharmaceutica Acta Helvetica* (24:-334, 1949), H. Sager states that since tablets and pills must be capable of rapid disintegration, it is important to know (1) how much water a disintegrating agent can take up and (2) how rapidly it can take up this water. Both of these values can be determined easily by the increase in weight of the agent in an atmosphere saturated with moisture. Determinations are outlined for water absorption and water release for the following: amylum maydis, amylum marantae, amylum oryzae, amylum tritici, amylum solani, agar-agar, gelatin, pectin. The disintegrating agents must be added to the powder mixture before granulation or this action is diminished. Of the 5 varieties of starches studies none shows any great deviation from the others although the water absorption is most rapid in the beginning with amylum maydis and the slowest with amylum oryzae. Agar-agar and gelatin surpass the values of all 5 starch varieties. Pectin stands last for 33 hours but after 96 hours, surpasses all other substances studied. The shrinking curves of the starches and agar agar follow similar courses; those of pectin change rapidly. It is recommended that the disintegrating agent to be used consist of a mixture of amylum maydis with pectin or amylum maydis with agar-agar.

Silk Products in Cosmetics

In a note in *The Perfumery and Essential Oil Record* (41:85, 1950) it is pointed out that although the ancient tribes in Asia and Africa were only vaguely aware of the properties derived from the silkworm when using them as they did as part of their strange medicinal formulae, chemical research has since recognized the active substance concerned as fibroin. In cosmetics and hygienic preparations chemically pure fibroin and the colloidal solutions of natural silk can be used. They are, for instance, met with in certain toilet and baby soaps, in toothpastes, mouthwashes and insect repellents, skin oils, ointments, and other products.

A report by F. O. W. Meyer, which appeared in *Perfumerie und Kosmetik* for February, 1950, is cited. He discussed several of the advantages resulting from the use of fibroin. Thus, the emulgent properties of soap solutions, mouthwashes, massage oils, etc. are strengthened by the mechanical effect of the friction caused by the fine floating fibres of fibroin. The adsorption effect is 400 per cent greater in preparations containing fibroin than those without. There is an increase in the foaming power when used in soaps and a higher detergent value. Soaps containing silk preparations are practically unaffected when used with hard water so that losses of soap through the formation of calcium salts are prevented. It has been shown that persons using toilet soaps containing silk preparations are unmolested by insects and, according to one report, there is even some degree of immunization of the skin against insect bites. It is also claimed that the properties of silk preparations in soaps and other cosmetics have also had a soothing effect upon persons suffering

KOMMON/ SCENTS!

Just when Senator McCarthy was preparing to pit his Barrymore against Dean Acheson's Lattimore, Washington developed a new fashion in exposés: Gambling.

•

So far, the only difference in the gambling investigation has been one of degree, rather than kind. Previously, politicians were just vigorously against Sin, with few willing to specify.

•

The Big Man in the Federal gambling quiz is Senator Estes Kefauver. The price is Six-to-Five the public can't pronounce it and Seven-to-Five they can't spell it.

•

At a glance, McCarthy and Costello seem to have replaced Abbott and Costello in the affections of fun loving Americans. In the language of the latest investigations, McCarthy has come up with three lemons. And poor Costello says he's the most misunderstood man in the numbers business outside of Albert Einstein.

•

For a while, Wisconsin's Joe McCarthy got better pitching than the Boston Red Sox's. "Lefty Louie" Budenz threw spitters that caught the eye of all who love fair play.

•

The Federal Gambling Investigation has had noble-purposed reflections in New York. It's even money that District Attorney Hogan rides bookmaker Frank Erickson from the front pages into City Hall.

•

One New York Grand Jury was so impressed with the D.A.'s evidence, the foreman forgot himself temporarily. Instead of reporting, "Indicted," he screamed: "Bingo!"

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Vitamin E in U.S.P. Petrolatum

It is not generally realized that when highly refined mineral oil is exposed to light it undergoes certain changes in odor and taste. The more highly refined is the oil, the more vulnerable it is to these light effects. Of interest, therefore, is the report that the addition of vitamin E (tocopherol) to white mineral oil (liquid petrolatum) for purposes of stabilization has been authorized under an amendment to U. S. Pharmacopoeial standards for liquid petrolatum, it was recently announced by the U.S.P. Committee of Revision. The use of vitamin E for reinforcing and stabilizing white mineral oil is covered by patents held by L. Sonneborn Sons, Inc., New York, petroleum refiners. Sonneborn, however, has offered to grant royalty-free licenses to use vitamin E under the above patent where such products are required by U. S. Government regulations to be of U.S.P. quality. Applications for licenses should be addressed to L. Sonneborn Sons, Inc., 300 Fourth Avenue, New York 10, N. Y. according to E. Fullerton Cook, Chairman of the U.S.P. Committee of Revision.

Comparative Evaluation of Antiperspirants

A method for the comparative evaluation of antiperspirants was described by E. L. Richardson and B. V. Meigs at the May 19, 1950 meeting of the Society of Cosmetic Chemists. For this purpose they developed the following procedure for measuring perspiration dates: A stream of dried air is drawn under vacuum at low speed (1-2 liters/minute) through a stainless steel cup snugly covering a limited skin area and is passed through a tared U-tube containing anhydrous calcium sulfate whereby the perspiration moisture picked up may be collected and weighed. The work here described was done on the inner surface of the forearm for working convenience and other reasons. The apparatus are used in pairs for simultaneous measurements on both forearms. Preliminary measurements are made to establish that the subject's two arms perspire equally. A test material is then applied daily to one arm. The other being untreated, and daily measurements of the two arms are made after the subject has stayed 30 to 45 minutes in a room at 105 to 110°F. to initiate thermal sweating. To compare two antiperspirants two groups of subjects are used, each group using one of the antiperspirants. An average "%Effect" for each group may be calculated daily from the individual measurements. From these data a fair comparison of the two antiperspirants for effectiveness with prolonged use may be made.

Plotted data were shown for individual subjects using an effective and an ineffective antiperspirant, as well as the grouped "%Effect" results for a group of subjects using the effective material and a group using the ineffective material. A correlation was also shown between the average amount of perspiration from the untreated arms of eleven subjects and average daily temperature over approximately one month.

In the discussion following the presentation of the report, it was stated that, by this method, liquid preparations proved to be better than antiperspirant creams. It was also noted that aluminum chloride can be classed as a good antiperspirant material, whereas aluminum sulfate was found to be rather ineffective for this purpose.

T.G.A. Standard for Dibasic Calcium Phosphate

The Toilet Goods Association Specification No. 35, issued on May 29, 1950, provides standards for the dental grade of stabilized dibasic calcium phosphate. As defined in this specification, dibasic calcuim phosphate stabilized dental grade is a white, odorless and tasteless powder consisting essentially of $CaHPO_4{:}2H_2O$ which has been stabilized to prevent caking and crystal formation. The specification also indicates test methods for determining identity, solubility and content of carbonate, fluorine, chloride, sulfate, barium, lead and arsenic. Methods are also provided for determining loss on ignition, particle size, apparent density, filtration value and stability.

New Suppository Bases

Realizing the shortcomings of cocoa butter and other suppository bases, W. C. Ward (*J. A. Ph. A.*, Scient. Ed. 39:265, 1950) investigated other materials for this purpose. His interest was attracted by a series of polyoxalkylene derivatives of sorbitol partial fatty acid esters, known to industry by the trade name, Tweens (Atlas Powder Co., Wilmington, Del.). Further investigation showed that these materials held considerable promise. Ward's work indicates that the Tweens, particularly Tween 61, offer a number of advantages when used as, or in, suppository bases. Tween 61 possess a melting point that is readily modified by small amounts of suitable adjuvants to any desired range. Dispersibility in fluids due to its surface-active properties covers mucous membranes with a smooth protective coating, produces greater retention of the molded body, and a minimal tendency to leak. The formation of an emulsion of the o/w type also allows ready diffusion of medicament. The bases prepared with Tweens are nontoxic, nonirritating in use, contain no volatile or odorous substance, not excessively greasy, neutral in reaction and stable. No impairment of melting behavior is noted over a twelve-month period. There is no tendency toward rancidity and most medicaments are compatible with these bases. The bases possess an elasticity and pliability which affords ease in use.

Photosensitivity of Sunscreens

It is pointed out by E. Christensen and A. C. Giese (*J. A. Ph. A.*, Scient. Ed. 39:223, 1950) that sunburn preventive preparations contain among other materials constituent chemicals called sunscreens with a marked absorption in the sunburn-producing region of the sunlight. Of the various properties desirable in the sunscreen one is a high resistance to photode-composition on exposure to sunlight. If the sunscreen loses its power to absorb the sunburn-producing radiations of sunlight, it is rendered useless. The sensitivity to light has often been mentioned in the literature, but no systematic investigation seems to have been made. It was the purpose of their study to determine the photosensitivity of representative sunscreens and to measure the changes in their absorption following irradiation.

In their work the changes in absorption of ultraviolet light were determined for fifteen sunscreens following two-hour exposures to a sunlamp. Some showed increases (ethyl-*p*-aminobenzoate, amyl and phenyl salicylate, menthyl anthranilate, 2-naphthol-6-sulfonic acid, tannic acid, and phenol), some showed decreases (benzyl-salicylate, homomenthyl cinnamate, benzylacetophenone), some showed little change (ethyl-*p*-dimethylaminobenzoate, menthyl, homomenthyl, and isoamyl salicylates). The data indicate that under the test conditions employed many sunscreens show relatively high stability withstanding many minimal erythemal doses without much change.

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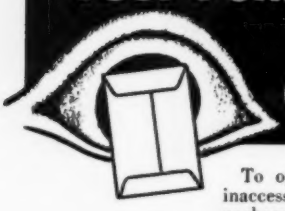

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Essence Petitgrain Clementinier

In a note on Essence Petitgrain Clementinier, J. Gattefosse and G. Igolen (*Fruits d' outre Mer* through *Perfumery & Essent. Oil Rec.* 40:408, 1949) point out that Clementinier, actually cultivated in Morocco, is not a specie, nor even a definite type, but a collection of varieties. The essential oil has been obtained with a yield of 1.7 per cent. Lightly tinted yellow, it possesses an odor similar to linalol, with a development on drying of an odor of methyl methylanthranilate. The oil has been found to have the following constants:

Specific gravity	**0.866**
Specific rotation	**+25°**
Index of refraction	**1.4718**
Acid value	**2.8**
Ester value	**15.4**
Ester value, after acetylation	**119**
Ester value, after formylation	**190.4**
Carbonyl index warm	**42 (½ hr.)**
Carbonyl index, cold	**42 (½ hr.)**
Total alcohol content (as linalol)	**52.4 per cent**

Oil of Pittosporum Tenuifolium

In one of several reports on essential oils from New Zealand, A. J. Calder and C. L. Carter (*J. Soc. Chem. Ind.* 68:355, 1949) have presented considerable information on the oil obtained from *Pittosporum tenuifolium.* It is endemic to New Zealand, a single tree attaining a height of 15 to 20 feet. It is variously named black maple, tawhiwhi and kohuhu. About 1,800 pounds of the leaves and terminal twigs were steam distilled to yield 0.134 per cent of an intensely blue oil. The oil had the following constants:

Specific gravity	**0.8842**
Specific rotation	**15.45°**
Index of refraction	**1.4811**
Acid value	**0.027**
Aldehyde absorption	**6.5 per cent**
Phenol absorption	**2.4 per cent**
Saponification value	**14**
Iodine value	**93.9**

By fractionation, the oil was shown to consist of normal terpenes and derivatives together with only a small amount of solid paraffins. The following constituents were isolated and characterized.

***d*-alpha-Pinene**	**43.2 per cent**
***d*-beta-Pinene**	**2.2 " "**
Myrcene	**0.9 " "**
Dipentene and *d*-limonene	**0.3 " "**
beta-Terpinene	**0.4 " "**
Terpene aldehyde	**0.3 " "**
l-Bornyl acetate	**1.4 " "**
Unknown sesquiterpene	**8.5 " "**
Tricylic sesquiterpene	**11.4 " "**
Impure bicyclic sesquiterpene	**10.5 " "**
Guaiazulene	**0.3 " "**
Solid paraffins	**0.05 " "**
Unidentified sesquiterpene alcohols and diterpenes	**3.3 " "**

Geraniol in Essence of Aspic

The presence of geraniol in the essence of aspic has been studied by Fesneaux and the results have been reported in *Industrial de la Perfumerie* for December, 1949. The essence used in his tests was obtained from the Guadalajara region of Spain. Its characteristics were as follows:

Density at 15°	**0.902**
Rotation at 20°	**–3°25′**
Refractive index at 25°	**1.465**
Total alcohols	**38.7%**
Ethers	**2.4%**
Solubility	**1:3 in alcohol at 65%**

Fesneaux notes that although fractional distillation is not a method of separating geraniol from other alcohols which often accompany it, he has used this method on a center fraction from a preliminary distillation with a Vigreux column of 44 points; it had the following characteristics:

Density at 15°	**0.900**
Rotation at 20°	**–1°25′**
Refractive index at 25°	**1.465**
Solubility	**1:3.3 in alcohol at 65%**

Further fractionation obtained a fraction boiling at 227 to 231° and treatment with calcium was applied until a liquid was obtained, having the characteristics of geraniol, thus:

Density at 15°	**0.889**
Rotation at 20°	**+1° 8′**
Refractive index at 25	**1.4755**
Solubility	**1:2 in 65% alcohol**
Total alcohols	**94.6%**

From these data and from various identification tests it is concluded that geraniol is present in the essence of aspic to the extent of approximately 3 to 5 per cent.

Oil of Litsea Guatemalensis

In their report in the *Journal of the American Pharmaceutical Association* (Scient. Ed. 39:204, 1950), G. H. Svoboda and L. M. Parks note that *Litsea guatemalensis* Mez. is a shrub or small tree, seldom more than six meters high, which is indigenous to Jalapa, Sacatepequez, Chimaltenango, and Guatemala, and is found in dense, moist forests, as well as in open pine forests and in thickets, at altitudes of 1500 to 3150 meters. The leaves of *L. glaucescens* HBK, and other species are said to have an aromatic odor similar to that of bay leaves. They are commonly used by the natives of Guatemala for flavoring foods, especially soups and eats.

An extensive literature survey indicated that there had been no previous investigation of the volatile oil obtained from *Litsea guatemalensis* Mez. Hence it was decided to determine the physical and chemical characteristics of the volatile oil from the plant. Tests were made on a sample of the oil obtained from a company in Guatemala. The oil, as received, was yellow in color and possessed a sharp camphoraceous odor. The following physical constants were determined:

Specific gravity	**0.9174**
Index of refraction	**1.4694**
Specific rotation	**–10.01°**

Purification and characterization of various fractions obtained upon fractional distillation of the oil under reduced pressure yielded 1, 8-cineole, *dl*-carvone, evidence for linalool, and indication of a hydrocarbon. The oil was found to contain 49.6 per cent of 1, 8-cineole.

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Composition of Gum Turpentines

In two reports appearing in the May, 1950 issue of the *Journal of the American Pharmaceutical Association*, Scientific Edition, A. J. Haagen-Smit, T. H. Wang and N. T. Mirov present information on the composition of gum turpentines from various species of pines. The first paper deals with the turpentines of four species of pine and these have been found to have the following compositions:

Pinus aristata, 96 per cent of *dl*- and *d*-α-pinene and 4 per cent of a tricyclic sesquiterpene of unknown structure.

P. balfouriana (northern location), 90 per cent of *dl*- and *d*-α-pinene, 2 per cent of *dl*- and 1-β-pinene, 2 per cent of *dl*- and *l*-limonene, and 4 per cent of a tricyclic sesquiterpene. *P. balfouriana* (southern location), 98 per cent of *dl*- and *d*-α-pinene and 1 per cent each of bornel acetate and a tricyclic sesquiterpene.

P. flexilis, 80 per cent of *dl*- and *d*-α-pinene, 13 per cent of albicaulene, a monocyclic sesquiterpene, and 7 per cent of a bicyclic sesquiterpene of unknown structure.

P. parviflora, 50 per cent of *dl*- and *l*-α-pinene, 2 per cent of an acetic ester of a terpene alcohol, 8 per cent of cadinene, 25 per cent of a bicyclic sesquiterpene of unknown structure, and 15 per cent of a mixture of albicaulene and a hydrocarbon which gives azulene upon dehydrogenation with sulfur.

It is of interest to note, say the investigators, that the same species of *P. balfouriana* from two different and isolated localities yield turpentines of different chemical composition. α-Pinene is the only constituent common to both, and yet it differs in two localities in the sign of optical rotation.

In the second paper, with the added efforts of C. T. Redemann, they discussed the composition of volatile oil in each oleoresin of four other pine species. Thus, the oleoresin of *Pinus ponderosa* contains 15 per cent of volatile oil. The volatile oil consists of approximately 50 per cent *l*-β-pinene, 20 per cent *l*-Δ^3-carene, 25 per cent dipentene and *l*-limonene, 3 per cent *d*-cadinene and less than 1 per cent of a new sesquiterpene named ponderene which forms a trihydrochloride m.p. 129-130°.

The oleoresin of *P. banksiana* contains 21 per cent dextrorotatory turpentine. This turpentine consists of α-pinene (85 per cent) and β-pinene (10 per cent).

The oleoresin of *P. canariensis* contains 27 per cent volatile gum turpentine. This oil consists of approximately 94 per cent *dl*-α-pinene, 2 per cent limonene, and 1.5 per cent formic and other esters of borneol.

The oleoresin of *P. washoensis* contains 18 to 22 per cent volatile oil. The volatile oil, obtained separately from several trees, consists largely of *d*-Δ^3-carene in varying quantities. In some trees with low carene content *l*-β-pinene is found. Small quantities of dipentene, α-pinene, and a cyclic sesquiterpene, are present in all trees examined.

Ciste-Lubdanum Oil

The ciste-lubdenum of Provence and the materials obtained from it are discussed in some detail by L. Trabaud (*Soap, Perf, & Cosmetics* 23:372, 1950.) The ciste or cistus, he notes, is found mainly on the slopes of the Esterel. The essential oil from Esterel ciste is an amber yellow liquid with an ambered balsamic odor. An oil obtained from fresh ciste had the following characteristics:

Specific gravity at 15°C.	**0.917**
Rotation	**—9° 52′**
Refractive index at 20°	**1.48783**
Acid value	**3.73**
Ester value	**30.8**
Ester value after formulation	**166.13**
Solubility in 90% alcohol	**1:0.2 vols. and more**

The origin of the plants, the time of gathering, the period elapsing between the moment of gathering and that of distilling, the method of distilling, are all factors which have a considerable influence on the physico-chemical characteristics of the essential oil. Besides the distilling process, there is generally adopted at Grasse the usual method of extraction by volatile solvents.

The solvent used is petroleum ether or else benzene, the latter solvent being more often used owing to the fact that it permits of more complete extraction and therefore a higher output of concrete oil. Indeed, whereas extraction by petroleum ether only gives a yield varying between 4 and 6 per cent, that obtained by benzene produces a yield that may amount to as much as 7.5 per cent. The concrete oils obtained are both of a green color, being very dark as regards the benzene concrete oil. They have the consistency of pitch or resin. The concrete oil obtained by the benzene process is harder and takes the form of a brittle-vitreous mixture.

The concrete oil of ciste is used in soapmaking, either as a direct addition to the paste or, much more usually, as an element in perfume compositions for soap such as lavender, fern, chypre, etc. Thanks to its powerful amber odor, its valuable fixative properties and its relatively low cost, it is an extremely important substance for such purposes. The absolute oil of citelubdanum is employed in perfumery in all compositions with the aforementioned odors. It may also be very satisfactorily blended with pine oil. In combination with oils of lavender, clary sage and bergamot, it provides a harmonious and clean-smelling base for perfumes intended for shaving creams and similar preparations.

Sometimes the dark green color of these ciste products, which often causes them to be called "green labdanum" is a nuisance, but this difficulty may be overcome by the use of the same products bleached ("decolores") and semi-bleached, i.e., devoid of chlorophyll.

In the essential oil of ciste-labdanum the ambered note is more delicate and possesses a marked animal character.

Compounds from Vanillin

In a paper presented at the 117th meeting of the American Chemical Society, I. A. Pearl and D. L. Beyer reported that because the flavoring vanillin field was already saturated by existing production, other outlets for commercial vanillin were sought. To this end vanillin was investigated as a chemical intermediate for the production of other organic chemicals which might have commercial utility. A number of new products very useful as nontoxic food preservatives, disinfectants, slime control agents, preservatives in general, plasticizers, plastics, pharmaceuticals, and sunscreens have been prepared and tested.

Recently, a number of new cinnamic acids have been prepared from vanillin and its derivatives. The ethyl esters of these acids have been prepared and tested for their toxicity toward representative spoilage producing micro-organisms, and for their ultraviolet light absorption characteristics. Although these products have only mild effectiveness as inhibitors for the growth of microorganisms, they do possess marked ultraviolet screening properties. Several of them are indicated for use as sunscreen materials for the prevention of sunburn while permitting suntan, and others are indicated for protecting cellulose, cellulose derivatives, and other plastics, films, and sheets from degradation caused by ultraviolet light.

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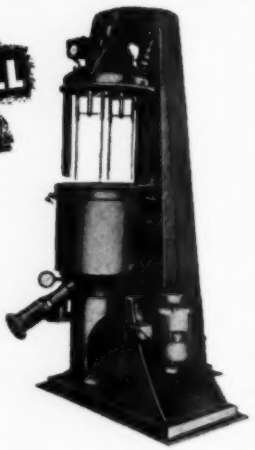

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Experience shows that pastes ordinarily requiring a long cycle of slow mixing can be processed with a saving of 60 to 80 per cent in normal processing time. Provided with heavy cover and jacket, the Abbé Dispersall Paste Mixer is ideally suited for either pressure, vacuum or high temperature operation. Capacities ranging from 5½ to 330 gal. Write for details.

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Antihistamine for Nocturnal Leg Cramps

The idea of using diphenhydramine ("Benadryl") for the treatment of nocturnal leg cramps was suggested to M. Naide (*J. A. M. A.* 142:1140, 1950) by the use of this drug for parkinsonism with improvement in muscle rigidity. The antihistamine was used in 17 patients with nocturnal cramps in the legs, with prevention of the cramp in all cases. In the first patient treated, quinidine sulfate had given no relief but diphenhydramine hydrochloride was wholly successful. In some patients the cramps failed to return after the drug was discontinued. In others, renewed diphenhydramine therapy relieved the cramps after discontinuance of the drug had resulted in return of the symptom. Naide observes that although nocturnal leg cramps can usually be prevented by quinine or quinidine sulfate, both of which he has used successfully in more than 100 patients, diphenhydramine has some advantages in certain groups of patients. For example, perhaps 50 per cent of women who are pregnant complain of leg cramps, which are at times severe. Obstetricians may hesitate to prescribe quinine for relief of leg cramps in pregnancy, whereas diphenhydramine is commonly administered antepartum for allergic conditions.

Pregnenolone in Arthritis

The therapeutic efficacy of cortisone and pituitary adrenocorticotropic hormone (ACTH) in rheumatoid arthritis has suggested the possible application of other steroid hormones in this disease. To this end H. Freeman and his associates (*J. A. M. A.* 142:1124, 1950) have selected Δ^5-pregnenolone because of (*a*) its possible role as a precursor of more active steroid hormones; (*b*) its effect on decreasing fatigue, (c) its sparing action on the adrenal cortex and (*d*) its lack of toxicity. In the preliminary investigations made by these workers a total of 30 patients with rheumatoid arthritis of varying degrees were given pregnenolone or pregnenolone acetate orally for an average of six weeks, the dosage averaging 500 mg. daily. Fifteen patients experienced striking relief; 11 patients showed a mild degree of improvement, and 4 patients did not obtain improvement. Of 16 subjects in whom treatment has been discontinued, improvement has been maintained an average of six weeks. No toxic effects were noted.

New Uses for Para-aminobenzoic Acid

In the *Archives of Internal Medicine* (85:27, 1950), C. J. D. Zarafonetes, A. C. Curtis and A. E. Gulick present their observations on six patients whom they treated with para-aminobenzoic acid. Two patients with dermatomyositis, one of whom also had scleroderma, improved greatly during prolonged therapy with para-aminobenzoic acid. Three of four patients with scleroderma experienced beneficial effects from similar treatment. The patients were given 2 Gm. every two hours, 3 Gm. every three hours or 2 Gm. every three hours. The cause of dermatomyositis and scleroderma is unknown, but the concept of "diffuse collagen disease" is generally accepted as applicable to them and to lupus erythematosus. Since para-aminobenzoic acid had proved effective in lupus erythematosus, it was reasoned that it might also be beneficial in dermatomyositis and in scleroderma. This proved to be the case in the aforementioned 6 cases, but the mechanism of action of para-aminobenzoic acid in derma-tomyositis and scleroderma remains obscure.

Studies on Terramycin

The May 6, 1950 issue of the *Journal of the American Medical Association* carries two very indicative reports on the new antibiotic, terramycin. The first of these presents the clinical observations made by E. Q. King and his associates. In their studies, terramycin hydrochloride, which *in vitro* has been shown to have a wide bacterial spectrum, was administered to 30 patients having various types of infections. These included pneumococcic pneumonias, urinary tract infections due to *Escherichia coli* and *Aerobacter aerogenes*, whooping cough, bacteremia due to *Salmonella cholerae-suis* var. Kunzendorf, pneumonitis and lung abscess with mixed bacterial infections. Assayable amounts of terramycin were found in the blood and urine within one hour and for five hours after the administration of 750 mg. of the drug by mouth. From these preliminary observations, terramycin appears to be a useful addition to the important class of antibiotic drugs. The results obtained in the treatment of urinary tract infections were promising. In our experience there was a low incidence of side reactions, most of which were mild and subsided with continued treatment. In an occasional instance severe gastrointestinal distress, including diarrhea, may necessitate withdrawal of the drug.

The second paper is a preliminary report on the use of terramycin in the treatment of venereal diseases. F. D. Hendricks and his colleagues observed that terramycin at proper dosage levels effects a satisfactory cure rate in the treatment of gonorrhea, although the dose required for cure is somewhat higher than has been necessary with chloramphenicol. From 1 to 2 Gm. of terramycin hydrochloride in divided doses gives a cure rate of 80 to 100 per cent, while single doses of 750 mg. of chloramphenicol give similar cure rates. Clinical healing of lesions of both syphilis and granuloma inguinale occurs promptly with terramycin hydrochloride given orally in doses of 60 mg. per kilogram of body weight per day.

Chloromycetin for Colitis

In a report to the Medical Society of the State of New York (through *Science News Letter* 57:312, 1950), Z. T. Berkovitz stated that marked or moderate improvement in two-thirds of a group of patients with ulcerative colitis has been achieved by treatment with chloromycetin. Those who improved began to get better within the first month. Of the 13 markedly improved patients, nine have remained completely well for periods of more than a year. In some cases there were relapses but they were mild and the patients promptly got better when chloromycetin was started again. No patient ever relapsed to as severe a state of illness as before the mold drug treatment. At least five years must elapse, however, Bercovitz said, before final conclusions

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on the results of treatment can be drawn. This period is needed to allow for evaluation of chloromycetin and also the many other conditions which may affect this disease.

Gelatin for Fragile Finger Nails

Following the chance observation that the feeding of gelatin was of benefit in a woman troubled with fragility of the finger nails, T. L. Tyson (*J. Investig. Dermat.* 14:323, 1950) has treated twelve patients (eleven women and one man, ranging in age from 40 to 55 years) who complained of soft, peeling, easily breaking finger nails. The condition had been present from one to fifteen years. In no instance was dietary deficiency detected. Six had taken thyroid in various doses without benefit and most of them had received local treatment without improvement. All of the women had used finger nail polish.

All of the patients were given 7.0 grams of a commercial gelatin dissolved in water or fruit juice to take once a day. In ten of these patients the white spots on the finger nails disappeared and the nails resumed completely normal appearance in thirteen weeks. In several patients similar changes in the toe nails improved concomitantly and several reported improvement in the growth of hair and eyebrows. Two cases failed to respond, but it was difficult to be certain that they had been consistent in the taking of the gelatin. One patient with psoriasis and arthritis and pronounced nail changes has shown marked improvement in nails after two months on gelatin.

Diplomycin, a New Antibiotic

The Danish investigator, B. Viking (*Ungesker. F. Laeger* 111:1443, 1949, through *J. A. M. A.* 143:400, 1950) reports that since July 1949 diplomycin, a component derived from a Diplococcus isolated by Noster in 1945, has been used in the treatment of 150 patients with different infectious disorders. Diplomycin exerts a pronounced antibacterial action on gram-positive and gram-negative micro-organisms and on tubercle bacilli. The antibiotic effect is ascribed to secretion products of the Diplococcus. Bacteria do not become resistant to diplomycin. It is effective against bacteria which have become resistant to penicillin and streptomycin. Its toxicity is slight. Applied in ointment, diploymycin exerted a notable effect on chronic ulcers of the leg and other localized infections. The clinical effect of intravenous injections of diplomycin filtrates in infections such as abscesses, mastitis and osteomyelitis was often equal to that attained with penicillin. In *Bacillus coli* infections of the urinary tract diploymycin was sometimes as effective as streptomycin and sometimes superior to it, without the latter's grave side effects. The results of tests of diploymcuin in the treatment of pulmonary tuberculosis are said to be promising.

Aureomycin for Skin Infections

The available methods of local treatment of chronic bacterial infections of the skin are still not entirely satisfactory. Most of the older compounds in common use have low antibacterial powers, and newer compounds such as the sulfonamides, penicillin and streptomycin may produce severe sensitization reactions following repeated local application. The introduction of the antibiotic, aureomycin has made available a compound which is markedly effective against several bacteria which produce infections of the skin. These facts and other observations prompted J. M. Siegal and E. T. Schantz (*Am. Pract. & Digest of Treat.* 1:608, 1950) to make a trial of local aureomycin therapy in a variety of pyodermic infections. Their report describes the results obtained in 50 patients. In addition, the sensitization index of aureomycin has been evaluated in a study of 127 subjects. In this work, a 3 per cent aureomycin ointment was used.

It was found that, in general, the forthright pyodermas such as impetigo, infected lacerations, infected herpes simplex, and folliculitis of the bearded area, responded dramatically, 80 to 90 per cent healing within the first 24 to 48 hours. Where the lesions were more indolent and deeper, such as chronic varicose ulcers and ecthyma, healing took place at a slower rate. Fifteen cases of impetigo in children and acute folliculitis of the face in men were cured entirely within less than a week. Five cases of severe sycosis vulgaris, all of more than four years' duration, were completely clear after ten days of treatment, and all have been using the ointment prophylactically without recurrence. Improvement was noted in the cases of infectious eczematoid dermatitis. In one of these patients, the ointment was stopped because of increased itching, although no clinical signs of sensitization were noted. In none of the patients were there signs of sensitization. From this work Siegal and E. T. Schantz got the impression that in the acute and chronic pyodermas, aureomycin applied topically appears much superior to any other local remedy. In the few cases of resistant sycosis vulgaris where it has been tried, the disease has been promptly controlled. Studies thus far indicate that this new antibiotic apparently possesses a low systemic as well as a low local sensitizing potential.

Role of Alcohol in Angina Pectoris

The relief of pain afforded by alcohol in the treatment of angina pectoris has resulted in its wide acceptance as one of the few effective coronary vasodilator drugs. Nevertheless, neither clinical nor experimental evidence thus far advanced lends support to the concept that alcohol augments coronary blood flow. To remedy this situation a study was undertaken by H. I. Russek, C. F. Naegele and F. D. Regan (*J. A. M. A.* 143:355, 1950) to determine, by means of an objective electrocardiographic technic, whether or not alcohol exerts a modifying influence on the response to exercise in patients with known coronary disease.

From these observations, it is concluded that alcohol is not a coronary vasodilator agent. Its role in coronary disease is solely that of a rapidly acting sedative which increases the threshold for pain while promoting a sense of well-being. Consequently, although its sedative and psychogenic action may have value in the general management of the disease and in the treatment of the anginal attack itself, alcohol must be considered a poor substitute for glyceryl trinitrate. Moreover, its employment prophylactically not only may create a false sense of physical fitness but may remove the protection afforded by angina. It would appear that existent views regarding the value of alcohol in the treatment of angina pectoris should be drastically amended.

Ointment for Seepage Control

In the *Bulletin of the American Society of Hospital Pharmacists* (7:92, 1950) G. L. Phillips describes the production of an ointment especially devised to control weeping or seeping types of dermatitis. This consists of:

Dehydrated glycerine	**20 Gm.**
Anhydrous lanolin, to make	**100 Gm.**

Mix with as little exposure to moisture as possible and package in air-tight containers. The glycerine was dehydrated on an electric hotplate at 305°F., with stirring, until no loss in weight occurred.

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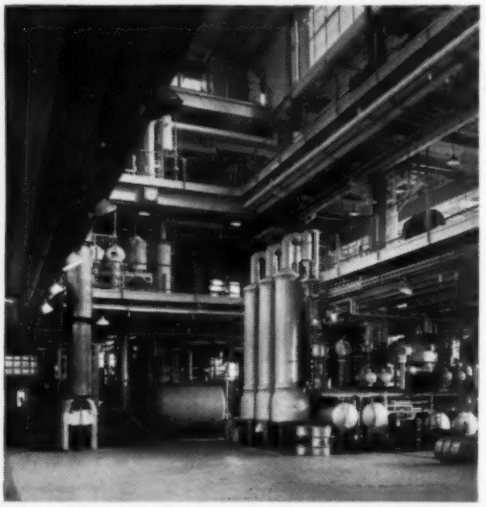

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ABREAST OF THE MARKETS

ESSENTIAL OILS REMAIN FIRM AS REPLACEMENT COSTS EXCEED SPOT PRICES; SHORTAGES IN DOMESTIC BOTANICALS; PAPAIN UP SHARPLY

Essential oils and botanicals remained stable as far as the month of June was concerned; however, there are signs which foretell the development of inflationary trends in the botanical market, both domestically, as reported last month, and in foreign areas.

The essential oil market held firm last month chiefly because this was the beginning of a non-productive period, during which dealers were trying to postpone as long as possible the purchase of new stocks and were attempting to get along with current holdings. It has become increasingly evident that foreign prices and replacement figures have been mounting to a level higher than spot prices in New York. Dealers have expressed the hope that, by delaying their replacement purchases as long as possible, they will cause foreign sellers to build up a backlog of essential oils which will in turn bring about a downward revision of prices. The most notable exception to date of this hoped-for condition has occurred in geranium oil which advanced $2.50 last month for the African variety and $1.50 for the Bourbon. There is such a very meagre supply on hand at the origin, it is said, that no conceivable change in dealers' buying habits could bring about a reduction in price. This short supply has resulted from the severe cyclones suffered earlier in the year in the Reunion Island area.

Botanical Outlook

As far as domestic botanicals are concerned, spokesmen in the trade have indicated that the cost of any of the important items most assuredly will not fall as low as the 1949 level.

An important economic straw in the wind may be the disappearance from the market of distressed lots of American Botanicals, or surplus quantities which must be sold quickly in order to negotiate a profit. Dealers have become extremely cautious it seems, and shy away from heavy inventories with the current prices so high, and the demand so uncertain. Instead, these buyers are developing the custom of buying in small lots at frequent intervals, and are then advised to arrange for their purchases during the producing season of the commodities in question.

One source has indicated that the domestic cultivation of belladonna leaves will be just about enough to meet the demand and that the 1950 foreign crop condition is still uncertain, chiefly because of its Iron-Curtain origin. This source has advised buyers to stock-pile the commodity in order to allow time to expand the domestic cultivation in the event of an emergency.

A severe shortage is expected to develop some time in the future in golden seal root. Because foreign countries are low in dollar currency, they have imported but small amounts of this herb—this has automatically depleted export sales of the commodity from the United States and has at the same time built up quite a heavy supply of root left over from former crops. The low market price of golden seal root which has resulted because of the extra supply on hand has, in turn, largely curtailed the cultivation of this domestic crop. When stocks are depleted, therefore, replacements will be slow in coming.

White pine bark, a by-product of the Southern lumber industry, may become extremely difficult to obtain at any price, unless the current slump in the demand for white pine lumber ends. A report has been received that demand for this type of wood is far over-shadowed by that for other varieties of timber indigenous to the southern states.

Oddly enough, a lumber boom has been cutting into the harvesting of many of the botanicals in the South, because the lumber industry has been drawing all the labor away from botanical picking. Most affected by this development has been cascara sagrada, which crop for this year is expected to be small, not only because of a small carry-over from last year, but also because production was delayed until late spring. And in addition, if the labor pool is attracted to other industries, a possibility which was mentioned last month, cascara may be firmer at the end of the season than it is now.

The senega root crop is late this year, according to an authority, because of the cool spring weather, but the crop is expected to be adequate. As for lobelia herb, prospects of the coming crop are difficult to determine. Last year's crop was almost entirely destroyed by flood waters.

• Prices quoted in this section were current on the first of this month.

Bois de Rose Firm

Although no change occurred in bois de rose last month, it was said to have been quoted at a price below that level which would allow proper profit on replacement costs. In general, dealers are buying the oil at the present time, while collection is taking place in Brazil and before the price advances further. What oil the collectors do not sell now, they will have to store until the end of the year, or until their stocks are depleted. It is very likely that the oil will increase still further in price, especially after the first of the year when the rose wood is no longer available due to transportation difficulties on the Amazon.

Papain Advances Sharply

Conforming to the prophecy submitted in February of this year, in which it was suggested that papain had reached a turning point in price movement and would advance appreciably in future months, the article jumped ahead sharply last month by 75c. Papain is now quoted in the range from $2.25 to $2.95. Actually, this is the range in which papain appeared in January, 1950. In the immediate months following, the article vascillated between $2.25 and the lower mark of $1.50. It is now believed by members of the trade that papain is beginning a true

(Continued on page 115)

ORANGE OIL ADVANCE SEEN IN FUTURE AS PRODUCTION FALLS; ALCOHOL CLIMBS 6c; VITAMIN B_{12} DROPS $1.53½

Signs continue to indicate that the frozen juice market is further disturbing the orange oil market. A reliable source who visited the Florida citrus oil market recently stated that several orange oil producers shut down completely their orange oil operations, in order to devote more time on the frozen juice market. An equally important reason for the cessation of oil operations, according to these producers, is also attributed to the low price-level of the orange oil, which has fallen to such a point that it does not pay the producers to bother with it.

In spite of the present conditions in the industry, however, there is apparently no cause for alarm, since authorities expect the industry pendulum to swing back to normal later in the year or early next year. It stands to reason that as individual producers cease orange oil operations, a parallel leveling off of essential-oil stocks will occur. In future months, as continued consumption eats into the stocks on hand, and becomes greater than the decreased production, the supply will dwindle so as to force the price of the oil up. The price will subsequently reach a height too attractive for producers to dismiss, and they will return to the production of the oil.

Signs which indicate that this trend may already have started are suggested by the fact that there is today less of a surplus of orange oil on hand than there was a year ago, and that the price is 19c below that of just a year ago. The price of Florida orange oil was quoted at 68c in June, 1949 and $1.00 for the California oil. The price fell off 8c to the level of 60c in August, and then advanced in October to 80c, where it has been maintained until June of this year when it suddenly dropped to 49c. The California oil also jumped ahead in October, 1949, to $1.25, where it remained until last month when it returned to the former price of $1.00.

The American distilled orange oil dropped 15c in June, to the range between 35c and 60c. It had formerly been quoted from 50c to 60c.

Alcohol Up 6c

For the first time since March the price of alcohol advanced 6c a gallon, from 47c to 53c, for denatured No. 1 Special, while the price of Ethyl USP 190 proof went ahead from $17.55 to $17.61. While there are many possible factors which might influence the price, the chief causes behind this recent climb, according to sources in the industry, are molasses, steel, and increased industrial consumption. Molasses, which is up to 12c a pound, compared with 8c in May, is said to be in short supply because of large orders from Great Britain.

Due to higher steel prices, alcohol, shipped in non-returnable drums, has been increased to cover the cost of the more expensive drums. The practice of charging a deposit on steel drums which could be returned when empty was ended during the war years and has never been resumed. Industrial consumption of alcohol has increased greatly along with the expanded national economy. Reports have been received that the manufacture of plastics has recently accounted for additional amounts of alcohol. Other important uses for alcohol occur in industry in the extraction of essential oils, petroleum refining, perfumes, rubber cements, and the production of synthetic rubber and rayon.

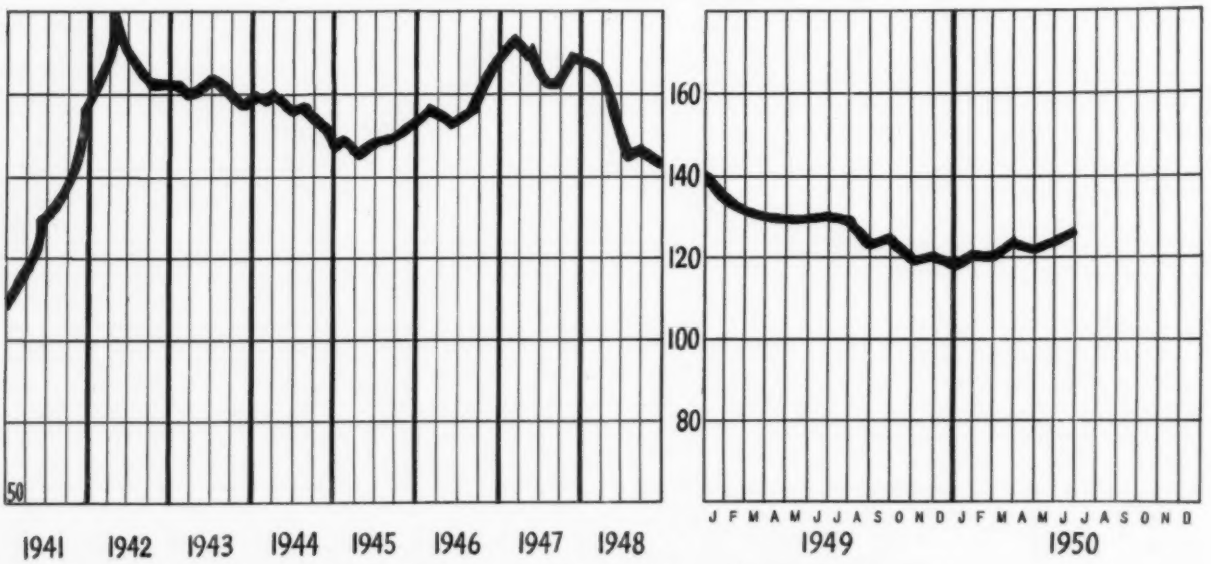
Vitamin B_{12} Declines Steeply

The price of crystalline Vitamin B_{12} dropped suddenly last month to 98½c per milligram, a fall of $1.53½ under the previous figure. The price change was attributed to greater economy brought about by increased production of the vitamin. At the same time, prices on Vitamin B_{12} concentrate were reduced to 75c per milligram for the parenteral grade solids of amorphous powder and 40c per milligram for the oral grade solids, tablets or capsules.

Top-Grade Lemon Oil Up

The highest quality Messina oil advanced last month by 50c to $5.75 a pound. The over-all situation is said to be serious, with new shipments being quoted by as much as a dollar higher

50 Raw Materials—Weighted Price Index. 1926 = 100.



The price index of fifty commodities for June advanced from 124.9 to 127.7.

JUNE PRICE CHANGES

UP

Alcohol, Denatured No. 1 Spec. 6c
Ethyl USP 190 proof 6c
Benzoin Gum, Sumatra 2c
Candelilla Wax 3c
Carnauba Wax No. 1 2c
North Country No. 3 3c
Cedar Leaf Oil 5c
Geranium Oil, African $2.50
Bourbon $1.50
Hydroxycitronellal 25c
Lime Oil, Expressed $3.75
Linalool 25c
Linalyl Acetate 25c
Papain, Pure, Powdered 75c
Spearmint Oil 15c
Spruce Oil 35c
Vetivert Oil, Java $1.50
Wormseed Oil 25c

DOWN

Almond Oil, Sweet 10c
Cinnamic Aldehyde 10c
Anise oil USP 5c
Bergamot oil 30c
Cade oil 3c
Citronella Oil, Ceylon 10c
Coriander Oil $1.50
Cream Tarter ¾c
Dill Oil $1.05
Eugenol 3c
Gamboge Gum 10c
Japan Wax 2c
Lemon Grass Oil 15c
Menthol 50c
Orange Oil, American, Cold pressed 31c
American Dist. 15c
Rosemary Oil 10c
Safrol 5c
Tartaric Acid 1½c
Thyme Oil, Red NF 10c

than former ones. The California oil remained in the range between $2.90 and $3.25, according to the brand.

According to government reports, production of the fruit was estimated at 10,000,000 boxes for the 1949-50 crop, which is 3 per cent above last year's figures, but 23 per cent below the average.

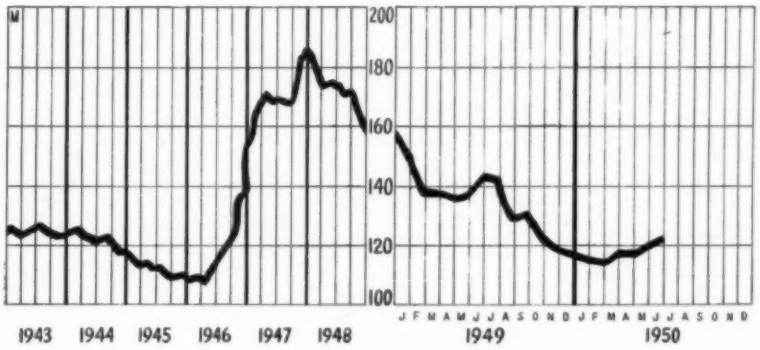
Papain Advances Sharply

(Continued from page 113)

upward swing, in keeping with the quotations from the origin.

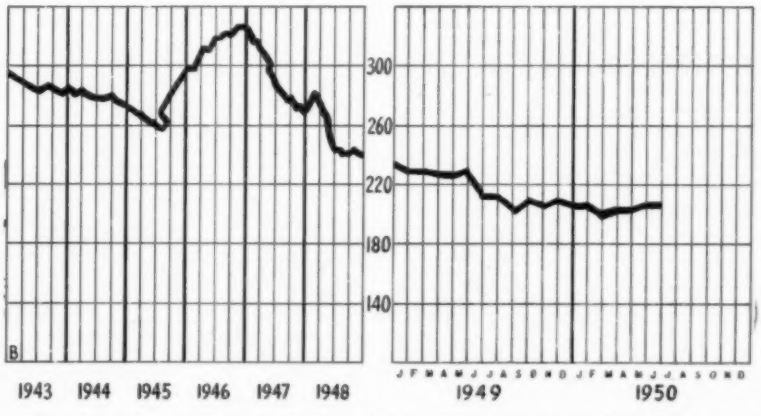
Several months ago foreign shippers were gradually moving their prices ahead in an effort to bring about a return to the price levels which prevailed prior to the devaluation of the pound sterling.

15 Medicinal Chemicals—Weighted Price Index. 1926 = 100.



The medicinal chemicals index advanced from 121.3 to 123.9. Alcohol advanced; menthol and cream of tartar declined.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index remained at 205.1. There were no price changes.

Importers in this country continued to delay making any price changes in anticipation of advanced replacement costs. Spokesmen in the botanical field issue the belief that replacement costs are now being reflected in current prices, for dealers have depleted their stocks and are being forced to replace them with higher priced materials.

Tartrates and Acid Reduced

Tartaric acid was reduced 2c a pound in June, to be quoted at 30c a pound in 250-pound lots, 31c a pound in 100-pound lots, and 33c a pound in a 50-pound drum. Cream of tartar was reduced by 1¼c a pound to the level of 26¾c a pound per barrel and 26¾c a pound in a 100-pound keg.

Carnauba Wax Little Firmer

Carnauba Wax is continuing to inch up toward the government floor price of $1.09 which was in effect before the barter material entered the market. It advanced 2c during June, from 94c to 96c for the lower limit and 97c for the outside price. The North Country No. 3 advanced 3c from 71c to 74c. Most of the barter wax is believed to be sold now, with perhaps a small shipment still afloat, judging from reports that dealers in Brazil have recently been unable to honor barter agreements. The wax is expected to continue its climb but is not expected to return to the previous $1.09 floor price which had been set by the government. No explanation has been offered as to why the Brazilian authorities are apparently sanctioning the sale of non-barter wax at a price 13c below the official minimum of $1.09.

Additional Wax Changes

Candellila wax returned to a more normal level last month, after having been forced down by a minor price war. The range now extends from 48c to 50c. Japan wax fell off 2c, to be quoted from 66c to 68c. The reason for the decline is said to be that consumers have swung over to a substitute wax which, although not quite as good as the Japan wax, is considerably less expensive.

Citronella Oil Down

In spite of the fact that reports have been received of a strengthening tone of the citronella market in Ceylon, one dealer indicated a price reduction of 10c in citronella on spot last month depending on grade. The range extended from $1.15 on the inside to $1.45 on the outside, or 5c more than the top price of $1.40 which was quoted in May.

Anise Continues Downward

Anise fell off again during June to the price of $1.05, or 5c less than the previous month. The general belief among the trade is that the oil will begin to advance in the near future for two reasons: Europe has been buying large stocks and a shipment of anise oil is expected to arrive in the United States soon from China. Price quotations on this shipment will probably be higher.

Menthol Situation Improved

An easier supply position from China brought about two downward price revisions of menthol last month from the $12 figure. The first one amounted to a 20c break and the second, which occurred during the last week of June, dropped the price 30c more to $11.50 a pound, according to quantity. Fair quantities of menthol have been arriving from China recently, but owing to the recent outbreak in Korea and the rushing of U. S. naval aid to the China coast, the menthol supply picture may change just as suddenly this month as it did a month ago.

Haiti Expanding Essential Oil Industry

Haiti is expected to become one of the more important producers of essential oils, according to the American Embassy in Port-au-Prince, judging from recent expansion of the industry. The island's exports have grown from a small shipment of 1,225 pounds delivered to the United States in 1932-33 to the export level of 196,575 pounds valued at U. S. $13,523 in 1948-49.

This island is the chief source of United States imports of oil of vetivert and is an important source of lemongrass oil, distilled oil of limes, and amyris oil. From October 1, 1948 to September 30, 1949, Haiti exported 91,090 pounds of amyris oil, 53,296 pounds of lemongrass oil, 22,965 pounds of distilled lime oil, 21,248 pounds of vetivert oil, 4,810 pounds of petit-grain oil, 3,089 pounds of citronella oil, 51 pounds of neroli oil, and 26 pounds of basil oil.

The Dejoi Enterprises, Hatian producer of essential oils, is now operating a 1,000-acre plantation of lime trees, and more than 3,000 acres planted with lemongrass, citronella, and vetivert. This company is planting 1,500 new acres in lemongrass and 300 new acres in citronella.

Bergamot Down 30c

Bergamot oil fell off 30c during June, from an inside price of $4.75 to that of $4.45. This decrease may be only temporary, however, in view of the fact that future shipment costs have been reported on the upgrade for the Italian oil.

Less Mint Crop Acreage

There may be a 5 per cent reduction in the acreage devoted to the mint-for-oil crops this year below that of last year, according to a report issued last month by the Bureau of Agricultural Economics of the Department of Agriculture. Although there is an increase of 9 per cent in acreage in the state of Washington, this is more than cancelled by acreage reductions up to 14 per cent over-all in Indiana (10 per cent), Michigan (1 per cent) and Oregon (3 per cent). The total acreage of these four states this year is 59,500 acres as compared with 62,000 acres for last year. This year's estimated acreage, however, according to the bureau, is 21 per cent above the 1939-48 average of 49,290 acres.

Of the total mint acreage, 76 per cent is in peppermint, and the remaining 24 per cent, in spearmint. This year's area which is devoted to peppermint is slightly larger than it was in 1949—45,100 acres compared with 44,900 for last year—and is 13 per cent above the 1939-48 average of 39,810 acres.

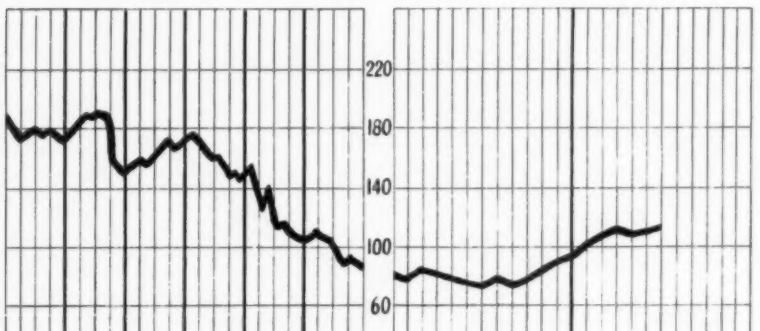
The spearmint acreage of 1950, which accounts for 36 per cent of the Indiana and Michigan acreage, is 19 per cent less than existed in 1949—14,400 acres compared with 17,700 acres last year—and is 52 per cent above the 1939-48 average of 9,480 acres.

The Bureau of Agricultural Economics issued no estimate of the probable oil production, but will issue this data in its August report.

Reproduced below are the state acreages of the two mint crops:

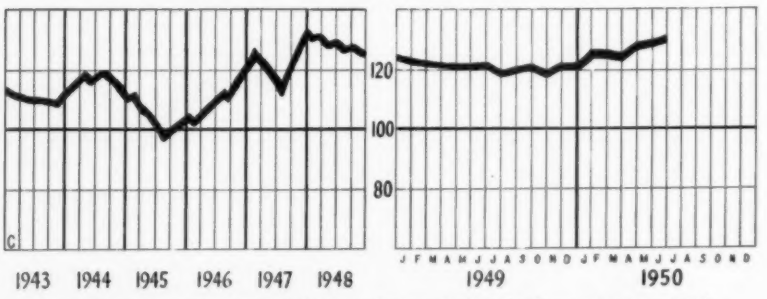
	1939-48 average	Indicated 1949	Indicated 1950
Peppermint—			
Indiana	14,920	16,200	16,000
Michigan	14,780	9,500	10,000
Ohio	110	.....	.....
California	570	.....	.....
Oregon	6,240	14,500	14,000
Washington	3,190	4,700	5,100
Total, six states	39,810	44,900	45,100
Spearmint—			
Indiana	6,470	11,700	9,000
Michigan	2,930	6,000	5,400
California	80	.....	.....
Total, three states	9,480	17,700	14,400

15 Essential Oils—Weighted Price Index. 1926 = 100.



The essential oils index advanced from 108.1 to 112.2. Geranium and lime oil were higher; anise, bergamot and citronella oil were lower.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926 = 100.



The cosmetic raw materials index advanced slightly from 129.3 to 129.8. Alcohol and candelilla wax went up; Japan wax and menthol went down.

READERS' QUESTIONS

HAIR CONDITIONING CREAM: We would like a formula for a scalp reconditioning cream. We intend to market a preparation of this sort and since we are new in the field, any advice you give us will be valuable. Daylon.

To make a scalp reconditioning cream, I would suggest that you try the following, which is a typical formula for such a product:

Lanolin	4.00
Diglycol stearate	15.00
Triethanolamine stearate	3.00
Cholesterin	0.50
Lecithin, vegetable	0.50
Peanut oil	6.50
Methyl p-hydroxybenzoate	0.25
Distilled water	70.25

This type of pack is warmed very carefully before application and is allowed to remain in contact with the hair and scalp for a reasonable period before being washed out. For home use it is best applied in the early part of the evening and washed out carefully with a good neutral shampoo before retiring.

PROTEIN HAIR PREPARATION: For some time we have been reading about hair preparations containing proteins and we would appreciate your advice concerning the value, if any, of a protein compound in a wave solution to be applied to the hair. Hamilton.

It is my impression that a curl or wave preparation has been made that contains a vegetable protein, like zein, and a wetting agent. There was considerable interest in this item some time ago, but I have heard very little about it recently. I believe that it was used as a new type of hair lacquer rather than as a wave setting composition.

DEODORANT INGREDIENTS: Our firm is currently engaged in the developing of a stick deodorant using an alcohol base gelled with sodium stearate. We have considered using oxyquinoline sulfate and/or zinc sulfocarbolate as the active ingredients in this preparation. We would appreciate any suggestions which you might offer as to the amounts of these materials which could be used safely and effectively. Waco.

I have checked various sources available to me and I find that oxyquinoline sulfate is used in a range of 2 to 3 per cent in deodorants. Zinc sulfocarbolate is used in a ratio of 2 to 5 per cent.

CLARITY IN WAVE SET: Would you advise us on a method of clarifying a wave set? Does water hardness have anything to do with its clarity, and if so, what is the minimum degree of hardness necessary to produce a clear product? Is it customary to filter this product? We shall be very grateful for any information you can give us. Mexico.

It is generally advisable to filter a wave set, or any liquid preparation, for that matter. This is probably best done by means of suitable filtering equipment, using filter pads appropriate to your product.

Hard water may of course influence the clarity of the solution, and it is preferable to use distilled water in making up any cosmetic preparations.

Of course, other factors may enter into the problem of clarity, such as the grade of gum used, lack of a preservative and certain other considerations.

INSECT REPELLENT: I would like to ask you a favor of giving me some advice on the preparation of preventives against mosquito bites. I would also like to know where I can get further information regarding this subject. Budapest.

A formula developed by American research workers at the Department of Agriculture calls for the use of:

Dimethyl phthalate	3
Indalone	1
2-ethyl-1, 3-hexanediol	1

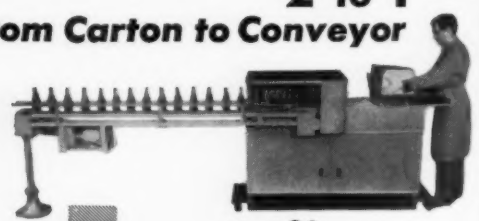
Although a number of articles have appeared in our publication concerning insect repellents, I think it would be most feasible for you to write for literature prepared by the Bureau of Entomology, United States Department of Agriculture, Washington, D. C.

AFTER SHAVE LOTION: Is it possible for you to give me the formula for a preparation which, though intended chiefly as an after shave lotion, could also be used for other purposes? Brooklyn.

A general purpose lotion which is also very satisfactory as an after shave lotion, can be made from:

Boric acid	2.30 per cent
Menthol	0.05 " "
Glycerine	2.00 " "
Alcohol	8.00 " "
Witchel hazel	87.15 " "
Perfume	0.50 " "

Beats Hand Unloading 2 to 1 From Carton to Conveyor



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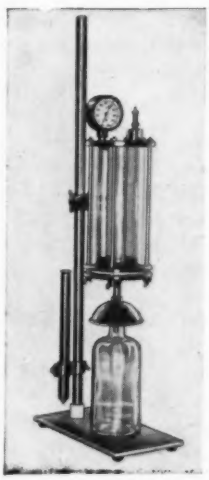
♦ Here are two practical units with a high degree of flexibility for handling small volumes of liquid. Can be used with cloth, paper, asbestos pads or other filter medium.

♦ Standard 2800 cc model at right consists of Pyrex glass cylinder, with all metal parts (except pressure gauge) which contact liquid made of stainless steel.



Standard 2800 cc Lab Filter

100 cc Pressure and Vacuum Filter

♦ Standard 100 cc 60 mm diameter laboratory filter at left has blown Pyrex glass body. Removal of pressure plug converts filter to suction type.

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INDUSTRY'S BOOKS

The Official Preparations of Pharmacy, by Charles Oren Lee, Ph.D., Professor of Pharmacy, Purdue University School of Pharmacy, 528 pp., Illus., The C. V. Mosby Co., St. Louis, $5.50.

This book has been written for the purpose of discussing the problems which pertain to the manufacture of the pharmaceutical preparations which are official in the U. S. Pharmacopoeia XIII and the National Formulary VIII. The plan of the book presents, first, a general discussion of each class of the preparations. The general discussion is then followed by a list of the preparations in a given class, arranged alphabetically according to the official English title. Last, comments are given about each preparation, including the problems of its manufacture and other points of information. The general discussions include definitions and processes involved in the manufacture of the preparations together with some discussion of the equipment regarded as useful in the making of the products in question. The problems of packaging, labeling, and storing are not only often given in the general discussion of a class of preparations, but are emphasized also in the comments pertaining to the separate items.

The General Report of the Pharmaceutical Survey 1946-49, Edward C. Elliott, Director, 240 pp., American Council on Education, Washington, D.C., $6.

The Pharmaceutical Survey was organized by the American Council on Education at the request of the American Association of Colleges of Pharmacy. This volume presents more facts about the profession of pharmacy, its teaching, its research, its licensure, and its practice as an integral part of business, than have ever been available before. The facts were compiled for the purpose of finding a basis for recommendations that would lead to improvements in the profession of pharmacy. These recommendations are Part XI of this volume and are the conclusions of a representative group of national leaders of pharmaceutical affairs. It is believed that these recommendations will exert a productive and progressive influence upon the professional thinking and action during the years of the immediate future. Here are practical suggestions for solving the problem of manpower—for teaching, for research, and for practicing—licensure, the financing of pharmaceutical education, the curriculum, and other specialized aspects of the profession.

The United States and The Restoration of World Trade, An Analysis and Appraisal of the ITO Charter and the General Agreement on Tariffs and Trade, by William Adams Brown, Jr., 572 pp., The Bookings Institution, Washington, D.C.

This book traces the historical background of the Charter of the International Trade Organization, and of the General Agreement on Tariffs and Trade. It gives a detailed account of their negotiation, explains their provisions and indicates the relationships between them. The first two years of the operation of the General Agreement are reviewed, and the relation of both instruments to the United Nations System and the European Recovery Program are analyzed. The charter and the Agreement are appraised in terms of their actual and potential contribution to the United States foreign economic policy objectives. In an Appendix the text of the Charter is presented in an analytical form emphasizing the rights and obligations of the members and of the Organization.

A New Dictionary of Chemistry, edited by Stephen Miall, LL.D., B.Sc., and L. MacKenzie Miall, B.A., F.R.I.C., Second Ed., 589 pp., Longmans, Green and Co., New York, $12.

There has long been a need for a one volume dictionary of chemistry, containing not only a brief explanation of the meaning of the terms used in chemistry and chemical engineering, but also brief accounts of many chemical substances, chemical operations, drugs, vitamins, and other bodies of biochemical importance. Chemists are not the only people who need accurate information on chemical matters: doctors, druggists, physiologists, chemical manufacturers, works managers, chemical engineers, patent agents, lawyers, journalists, and many others have from time to time occasion to learn something that is included in so wide a subject as chemistry. This dictionary is intended to be useful not only to chemists, but also to the wider circle indicated above. It is intended to provide in one volume of moderate size, a mass of miscellaneous information of chemical matters in general.

Formulaire de Parfumerie et de Cosmetologie, by R.-M. Gattefosse. Girardot & Cie., 27, Quai des Grands-Augustens, Paris (6), France, 1950, 367 pp., Price 1600 French francs.

The name of R.-M. Gattefosse is unique in modern perfumery. An indefatigable writer, he has dedicated a prolific pen to four decades of ceaseless chronicling, during which time he has investigated diverse facets of subjects relating to beauty and to fragrance. His latest book follows in the tradition of those he has written before: simple explanation, typical formulas, that may serve as a point of departure for the novice, that may suggest to the advanced, or may impart to those acquainted with some aspects of this art an introduction to others.

The greater part of the work deals with perfumery; less than 100 pages are devoted to creams, lipsticks, dentifrices, powders, nail and hair preparations.

Following some tables on solubility and other data for aromatics, the author plunges into formulations. He divides floral notes into "families," placing in the jasmin group, for example, lilac, muguet, cyclamen, and ylang, in addition to jasmin itself. Formulas are then offered, which are usually self-sufficient; however, on occasion, there are constituents called "jasmin artificiel" and "muguet artificiel," generalizations that are well nigh meaningless, and in one instance making up 86.5 per cent of the perfume base.

Whatever may be the value of this work in France, it is doubtful if in America the section on cosmetics will will prove to be as interesting as that on perfume. Many volumes, particularly those of deNavarre and Harry, offer more complete and, for this country, more up-to-date data.

Multiple Seizures

(Continued from page 35)

language of the Supreme Court, "seizures and suits are dependent on the discretion of the Attorney General."

In this regard the Supreme Court could have fortified its point by a rather significant analogy. Elsewhere in the Federal Food, Drug, and Cosmetic Act there is a provision requiring the Food and Drug Administration to afford every party suspected of violating the law an opportunity to show why criminal prosecution should not ensue, before prosecution is recommended by the Administration to the proper United States Attorney. It is now well settled by the Supreme Court that the failure on the part of the Administration to provide for such a hearing will not invalidate a prosecution laid under the Act. The rationale of the Court in such a situation was that the absence of a hearing constituted only administrative dereliction which did not affect the jurisdiction of the district court to hear and decide the criminal case. It should be noted parenthetically that the Food and Drug Administration now follows and for years past has followed a rigid rule of providing for such a hearing before making its recommendation in criminal cases. The validity of a prosecution, however, despite the absence of a prior administrative hearing expressly required by law, points up the uncontrolling aspect of the function of the Food and Drug Administration in litigation brought under the Federal Food, Drug, and Cosmetic Act.

The Supreme Court plainly stated its understanding "that multiple seizure decisions of the administrator can cause irreparable damage to a business." It pointed out, however, that the initiation, itself, of criminal proceedings either by information or by indictment returned by a grand jury likewise can cause serious consequences. The Court made abundantly clear the proposition that so long as the party involved has his day in court his constitutional rights are protected. Hence, since a distributor of a product, multiple seizure actions against which have been instituted, is entitled to appear in court as claimant and contest the Government's allegations, his constitutional rights are not infringed.

In striking down the right of judicial review of the administrative determination of probable cause, which had been exercised by the District Court, the Supreme Court merely followed the statutory scheme. The pertinent section of the law explicitely provides for an administrative and not a judicial determination, the latter of which would result in any review by the courts. On this point two judges of the Supreme Court dissented. Actually, this minority of the Court did not expressly disagree with the majority decision; they vehemently proclaimed, however, that a study of the record should have been undertaken to ascertain whether the District Court was right in holding that the administrative determination of probable cause was arbitrary and capricious. The majority opinion, on the other hand, reasoned that to sanction judicial review would result in impeding "the speedy, preventive device of multiple seizures."

There is no question but that the Supreme Court decision was induced in large measure by a very practical consideration. A contrary decision would invite a court challenge of the validity of the administrative determination in every case of alleged misbranding involving multiple seizures. The Court's opinion states: "What we do today determines the jurisdiction of the District Court in all the cases in that category. If the court in the present case can halt all multiple seizures but one, so can the court in other cases." The prospect of such impairment of the efficient administration and enforcement of the Federal Food, Drug, and Cosmetic Act was not attractive to the Supreme Court.

II
PRACTICAL ASPECTS

There are three avenues available as practical approaches to the problem of how to avoid or to reduce the harmful effects of multiple seizure actions.

The first is by consultation with the Food and Drug Administration before interstate distribution of a new product, or one whose formula or labeling has been changed, is undertaken. In the development of the administration of the Federal Food, Drug, and Cosmetic Act, the role of the Food and Drug Administration as a compliance guide has become quite significant. Technically the views of the Administration concerning the legality of a product and its labeling submitted for an administrative opinion, do not constitute a legal adjudication. The reason is that what is rendered is simply an administrative opinion. Under the pattern of the Act, the United States courts are the forum for hearing and deciding issues of legality of products which come under the jurisdiction of the Federal Food, Drug, and Cosmetic Act.

In a practical sense, however, labeling of a product which conforms with the expressed views of the Administration are not misbranded and may be shipped in interstate commerce with impunity. It is, after all, an invariable rule that the Department of Justice will not initiate a food and drug enforcement action without a prior recommendation from the Food and Drug Administration. This is not to say, however, that the administrative attitudes remain static. Consequently, distributors of products sanctioned by the Food and Drug Administration should be alert to note changes of administrative opinion based, among other things, on scientific development.

It is interesting to note that the hearing which claimant in the Mytinger and Casselberry case unsuccessfully contended it was constitutionally deprived of, could have been obtained before even the first seizure action was commenced. If anything, informal discussions with the Administration concerning the legality of a product before its marketing is launched would seem more productive than an adversary administrative hearing conducted against a background of pending judicial litigation.

While the subject under discussion is multiple seizures, this primary approach of procuring an administrative opinion is obviously also a means of avoiding the initiation of a criminal prosecution or an injunction proceeding, as well as a single seizure action. With regard to these three types of enforcement proceedings the Administration exercises its discretion as to the institution of which one or more most effectively would protect the public, and then makes its recommendation to the Attorney General. This does not mean that the Food and Drug Administration recommends an enforcement case whenever a violation is detected. In fact the Federal Food, Drug, and Cosmetic Act expressly lodges discretion in the Administrator to refrain from recommending an enforcement proceeding in cases of minor violations "whenever he believes that the public interest will be adequately served by a suitable written notice or warning."

A second practical approach can be made even if litigation has been commenced. Circumstances in this connection can be so varied that only two general situations can fruitfully be discussed here. Diligence is the watch-word for the conduct of a distributor immediately upon notice of the institution of a seizure action. His best interests require a speedy decision as to whether he will contest the Government's allegations. If misbranding is charged and he is persuaded as to the soundness of the Government's position, prompt discussions with the Food and Drug Administration looking toward revised labeling would be his wisest course.

In situations where a distributor feels that a seizure proceeding against a shipment of his product has been unjustifiably initiated and can successfully be defended, equally prompt action is indicated, if multiple seizures are imminent. Imminence of multiple seizures cannot always be ascertained. Since under the Mytinger and Casselberry decision a claimant is now definitely not entitled to notice of or hearing on a determination of probable cause and since enforcement recommendations are purely intra-Government matters, prior direct notice of plural seizures is not to be expected. Any attempt to conjecture whether the criteria of the bases of the administrative determination have been met by the labeling of a product would be pointless. There is every presumption that a distributor will not deliberately place in the stream of interstate commerce a product whose labeling is fraudulent or renders the product dangerous to health. The administrative answer to the question whether labeling renders the product misleading in a material respect to the potential harm of consumers cannot gainfully be guessed. The point sought to be made here is that an honest distributor whose product has been the subject of one seizure and who has reason to fear multiple seizures, should not waste time speculating on the administrative standards applied in probable cause determinations.

Consignees of shipments of the product perhaps constitute the best source of information concerning the imminence of plural seizures. The reason for this is that

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as is commonly known Food and Drug Inspectors verify the arrival and continued presence of shipments of suspected goods pending action on Administration recommendations for seizure thereof. Absenting advance information of specific prospective plural seizures, the only manner in which a distributor can learn of a program for multiple seizures of an allegedly misbranded product is by notice of a second seizure for the same alleged misbranding. This will mean that a determination of probable cause has been rendered and that the the Administration will recommend seizure of every detected shipment of the product involved.

If the issues involve alleged misbranding unrelated to the health danger aspect, promptness of action in the pending seizure action might result in heading off seizures of further interstate shipments of the product. Very simply this promptness of conduct would be in the line of rapid preparation and application to the district court for a speedy trial. The same course of action is indicated if multiple seizures have been commenced, except that in addition application for consolidation of all pending seizure actions should be made.

The next step in this second practical approach to stave off further seizure actions is discussions with the Food and Drug Administration. It is not unlikely that the Administration would be favorably impressed by the diligent efforts of a claimant to procure a speedy trial. Whether the Administration otherwise could be persuaded that the public interest would not be unduly prejudiced by the continued distribution of the product involved, pending judgment in the case or cases already brought, would depend in large part on the nature of the alleged misbranding.

The third and final practical approach is to the Department of Justice. Use of this approach obviously would be rendered unnecessary if the Food and Drug Administration were persuaded not to recommend further seizures based on the same misbranding involved in a pending case or cases.

Traditionally, the Department has maintained a more objective attitude of law enforcement than the various administrative agencies which recommend enforcement cases. So far as is known, this stems historically not from any calculated policy formulated by an Attorney General. It appears rather to be an outgrowth of attitudes resulting from the respective functions exercised. The close day to day relationship of a particular administrative agency to the operation of a law under its charge quite naturally tends to create an atmosphere of zeal for the most vigorous administration of that law. The Department of Justice, on the other hand, functioning as the enforcement arm of the entire federal government, discharges its responsibility in a somewhat different atmosphere.

The Mytinger and Casselberry case now specifically underscores the responsibility of the Department of Justice for the ultimate decision concerning the institution of enforcement proceedings under the Federal Food, Drug, and Cosmetic Act. In view of this ultimate

responsibility the Department of Justice is the last place of resort to save a distributor from further multiple seizures. Good faith on the part of an owner of a product subjected to one or more seizures, manifested by an application for a quick trial, would make a salutary impression on the Department, and in circumstances otherwise favorable it is expected that the Department of Justice would be receptive to a request to halt further seizures pending decision in the case or cases already brought.

Test Marketing a New Product

(Continued from page 49)

you could also predict sales and would not have to test. Package size is an important consideration here too. Small original packages give you a better feel of product movement and may permit a reasonable estimate to be made sooner than would be the case with bulk sizes.

Another factor which always concerns us in introducing a test product is what we call market "spill-over." Under our method of distribution, we know the amount of our shipments into any test market, but we also know that the goods may be sold across our market lines by the wholesaler. For example, we can hardly ask McKesson & Robbins in Albany not so sell SKF products in Vermont or Massachusetts simply for the convenience of our statisticians. If a new product were being put on test in a market which included New York but not Massachusetts or Vermont, we would inform the Albany wholesalers of this fact and tell them that physicians in Massachusetts and Vermont were not being promoted. We would also inform wholesalers in areas surrounding the test market of the situation to prepare them for possible orders.

It is always our hope that no word of the new product being tested will leak out to physicians or pharmacists in other areas, but this is usually a vain hope. A prescription written by a physician in another part of the country can set off a minor chain reaction. The pharmacist who has never heard of the product orders it from his wholesaler who is equally in the dark. Both of them wonder how they happened to miss that one and proceed to stock up. A few such incidents can build up a substantial amount of artificial sales and certainly do not help your good will.

We were more than a little embarrassed in one case where an article which mentioned a test product favorably appeared in a medical journal with national circulation. A series of these minor chain reactions resulted and we began to receive orders from wholesalers all over the country. Actually, we did not want to fill these orders. We cut the quantities down severely and gave each wholesaler the full story, telling him that the product was not being promoted to physicians in his part of the country and that he could not expect any real movement on it.

Now I come to my third general question "How do we interpret test results?" The important thing here is to watch the movement of the test product until some

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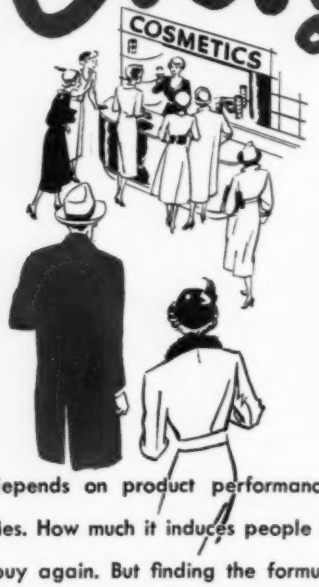

BASICALLY it depends on product performance! How well it satisfies. How much it induces people to want more and buy again. But finding the formula which wins popular acceptance (and builds repeat business) is no simple task . . . Only thoroughgoing research, teamed up with specialized compounding skill can achieve that goal — **ECONOMICALLY.**

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reasonably normal pattern seems to have appeared. We will not have many wholesale customers in a test area. Over-optimism on the part of one wholesale buyer could make a lot of difference. Therefore, we check re-orders on a customer-by-customer basis. Sometimes a product catches on so rapidly that we can be sure of its success very soon. We will not be able to make a very accurate sales prediction at that point, but we will be able to say that the product is an interesting one from a sales point of view. Sometimes re-orders are very slow in appearing. In such cases we are necessarily uncertain as to whether there is any movement at all. In most cases we depend on third and fourth month sales for our first estimate, but may not venture an estimate until the end of the 6th month. I should say here, that we pay almost as much attention to the shape of the sales curve as to the total amount of business. Here are some of the other questions we consider:

1. Is a product moving in all parts of the test area, or are re-orders coming largely from one locality?
2. Is this a seasonal product or is it one which should have a reasonably steady movement the year around?
3. How much additional promotional support, such as journal advertising, would the product get if introduced nationally?
4. What sort of comments, if any, are we getting from physicians through our Professional Service representatives, through the mail, or at convention exhibits?

On this latter point, we do not wait for the comments to come to us. After the product has been out for a few months, we conduct a Market Research survey on it. Our people go out into the test area and call on a sample of physicians to determine whether they have heard of the product, whether they have used it—this is very important—whether they are still using it, and what sort of results they are securing. We also secure information on method of administration, dosage, indications, etc. We place a great deal of weight on the findings of these surveys. They can give us ideas for copy changes, new sales appeals, and so on. They also help us to interpret our sales data.

Consider two extreme possibilities: In one case, we might find that a very considerable proportion of physicians had tried the product and that practically none of them were still using it. This would, of course, be very discouraging, although it might have built up very attractive sales figures. At the other extreme, we might find that very few physicians were aware of the product, but that those isolated ones who had tried it were tremendously enthusiastic and gave us every indication of being completely sold on it. In this case we might conclude that our low sales figures to date were not too discouraging.

I suspect that I have taken your time to tell you a great many things that you already knew. Frankly, I have little idea of how other companies conduct marketing tests. In agreeing to appear here, I said that all I could do would be to give you some idea as to how we go about it at SKF. I certainly do not assume

that ours is the best way or the only way, but this, for what it is worth, is our story.

Cosmetic Pressure Packaging

(*Continued from page 37*)

Attached to the top of the body of the can is a simple dispensing valve. The dispensing action is to depress the plastic piece to release the mist; merely remove the finger to stop spray. Decoration consists of a base coat plus three colors. A plastic cover cap is supplied by Sun Tube or can be individually designed for the individual customer.

The Crown Can Company of Philadelphia, Pennsylvania also produces containers suitable for a cosmetic-type product. They are known as the 6 oz. tall and the 6 oz. squat. The 6 oz. tall is 2-1/8 inches by 4-11/16 inches high and can be manufactured from either C. R. steel or tin plate. Interior coatings of chemically resistant lacquer can be provided. For decoration, a complete line of standard base coatings with three color printing is available. The six ounce squat is 2⅞ inches by 2¾ inches and can be made from the same materials.

The Continental Can Company, at the moment producing a twelve ounce aerosol can, will shortly have available smaller sizes suitable for this application.

Aerosol is a term which refers to the colloidal suspension of liquid or solid particles in a gaseous phase. More specifically, in the aerosol industry, an aerosol is created by the expansion of a liquified gas through fine orifices in a nozzle; said expansion resulting in a tremendous increase of volume as the propellant passes from the liquid to the gaseous state. Due to this expansion, the material to be dispensed is thereby dispersed in the atmosphere in a fine mist with particle sizes as small as approximately 10 microns.

Many products, such as suntan oils, involve the covering of surface with a film and cannot be regarded as true aerosols, hence they are best referred to self-dispensing or pressure propelled products.

Generally speaking, an aerosol dispenser consists of a container, a dispensing means, a liquified gas or propellant and the material to be dispersed. Upon the selection of a propellant and its relative proportions with the concentrate rest the physical characteristics of the product; thus, it is possible to obtain a fine mist which will be suspended in the air for hours as is required for a room deodorant, or it is possible to obtain a course or wet spray as is required for an underarm deodorant.

Aerosol propellants are offered by Kinetic Chemicals, Inc. of Wilmington, Delaware, and the General Chemical Division of the Allied Chemical and Dye Corporation.

Kinetic Chemicals, Inc. offers the following materials for use as propellants:

	Boiling Point
Freon-12	–12°F.
Freon-11	74.7°F.
Freon-114	38.4°F.

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General Chemical offers the following materials for the use as propellants:

	Boiling Point
Genetron-101	15.4°F.
Genetron-102 P	–24.5°F.
Genetron-102 J	5.5°F.

(The above is not a complete listing but covers those propellants now in general use.)

Freon-12, gauge pressure of 70 p.s.i. at 70°F., was used exclusively as the propellant in the "high pressure" bomb, but with the advent of "low pressure" aerosols, mixtures of Freon-12 and Freon-11 largely surplanted Freon-12 as the propellant. The Freon-11 in the mixture serves two purposes; as a pressure depressant for the Freon-12 and as a solvent to be dispersed. Freon-12 alone is still retained as a propellant where the concentrate acts as the pressure depressant to bring the resultant pressure below the ICC limit of 40 p.s.i.g. at 70°F.

Genetron 102-J is comparable to the Freon-11 and Freon-12 mixtures in its general application in the industry. There are, however, slight differences in solubilities between the two products.

The most stable of the propellant compounds are the Freon-12 and Freon-114 combination and the Genetron 101. Extensive tests have indicated that, in the presence of alcohol and aluminum, these propellants show less tendency to break down and form corrosive elements. For cosmetic preparations Freon-12 and Freon-114 combination and Genetron 101 will have widespread application.

Figure I shows the vapor pressure curves for various Freon 12 and Freon 114 mixtures. It is obvious, from a casual inspection of the chart, that pressures can be varied at will; being solely dependent upon the relative proportions of the Freons. The final pressure in the container will be somewhat below the theoretical figure due to the presence of the material to be dispensed.

It should be noted that there is no marked change in internal pressure during the life of the can. In other words, as product is dispensed, the internal pressure remains substantially constant for a given ambient temperature as long as propellant in liquid form remains in the container.

A discussion of self-dispensing products would not be complete without mention of the foam or fluff type product. Whipped cream has been on the market for more than a year in pressure propelled packages. Interest has now turned to shaving cream, shampoo, hand creams and other cosmetic type products. The principal difference between the food and cosmetic packages lies in choice of propellants; whipped cream uses nitrous oxide and CO_2 combinations and the cosmetic industry uses liquified gases.

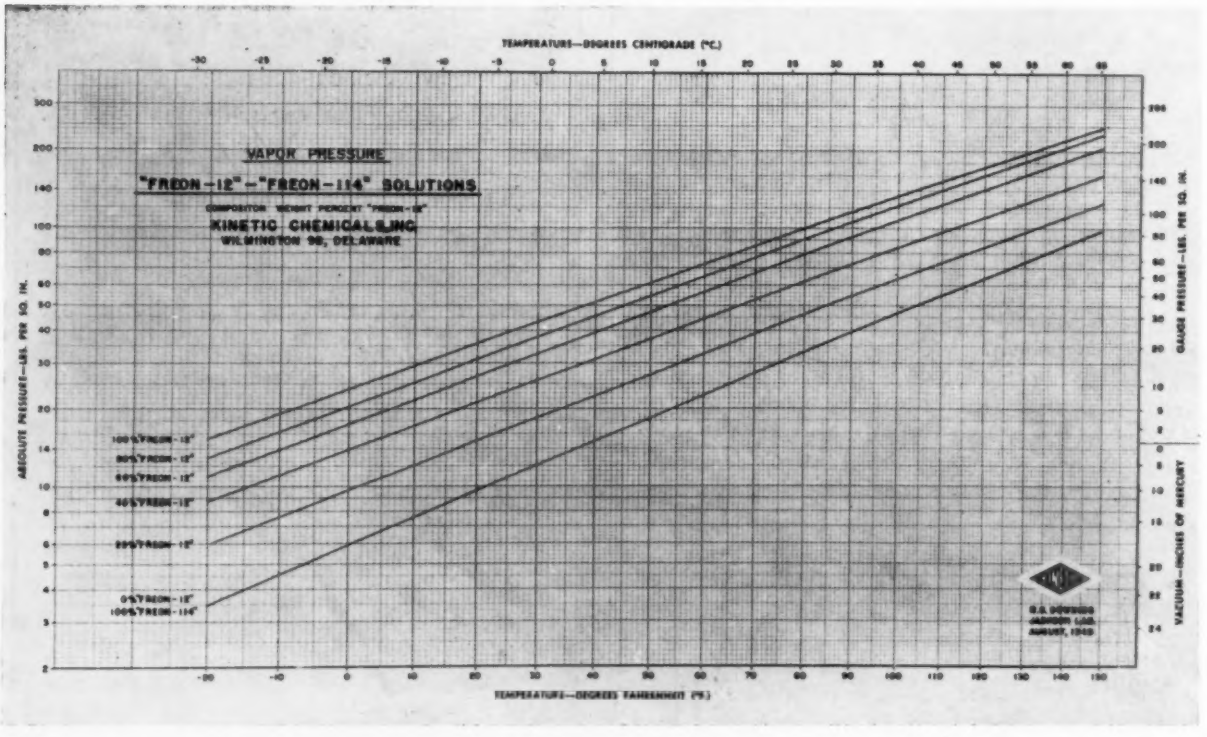
The amount of foam generated is an important characteristic of this type of product. A measure of the degree of foaming is the volume of foam compared with the volume of the original liquid. This can be calculated as follows:

$$\frac{Vf\text{-}Ve}{Ve} \times 100 = \% \text{ Overrun}$$

Tests conducted have indicated overruns in the range 1,000-3,000 per cent, depending on product, propellant and nature of formulation.

Although, much experimental work has been done on foam formulations, this segment of the pressure pro-

FIGURE I



pelled package industry is comparatively new and much work remains to be done.

The dispensing valve required is substantially different in design from the standard types of aerosol valves. A satisfactory foam valve must perform the following functions:

a—Provide tight seal against leakage.

b—Materials of the valve should not be unduly affected by the formulation.

c—Should be capable of being gassed easily.

d—Should be so designed as to allow for a maximum expansion of product, and therefore maximum amount of overrun.

Much time and effort can be saved by the proper approach to the development of a cosmetic self-dispensing package. It should be realized, at the beginning, that it is frequently impossible to convert a formulation merely by the addition of propellant; in many cases the concentrate must be specifically developed for aerosol use.

To be acceptable as a product the formulation should meet the following specifications:

1. Its purpose, whether it be cologne, suntan, or some other function, should be accomplished economically.
2. The formulation should not affect the materials of the dispensing valve.
3. The formulation should not contain materials that would clog the valve.
4. The formulation should not react with the material of the container.
5. Concentrate should be miscible with the propellant.

Since the self-dispensing package is new, and the field a highly specialized one, it is best, in developing a product to work in conjunction with a contract filler. However, much can be done in the initial stages of development before the joint work is undertaken.

The first essential is that the concentrate be miscible with the propellant. Since most laboratories are not equipped to handle liquified gases, initial miscibility tests may be run with carbon tetrachloride. Generally, if the product is not soluble in carbon tetrachloride, it will also prove to be insoluble in the final propellant. On the other hand, solubility in carbon tetrachloride, though a good indication, does not always mean solubility in the final propellant.

For those laboratories equipped to handle liquified gases, solubility tests may be carried on in laboratory pressure flasks or in any bottle which will stand the pressure and is capable of being sealed against leakage.

Common aerosol filling procedure is to cool both concentrate and propellant to temperatures below zero degrees F. before filling into the can. The lower the filling temperature, the smaller the degree of foaming or gas loss. It is important, therefore, to determine the freezing temperature of the concentrate and also the temperature at which the viscosity change may be so great so as to introduce production difficulties.

Since many fixatives used in alcohol perfumes are

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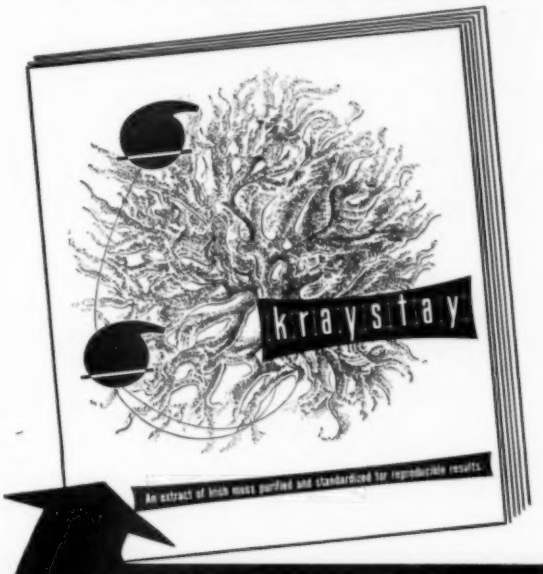

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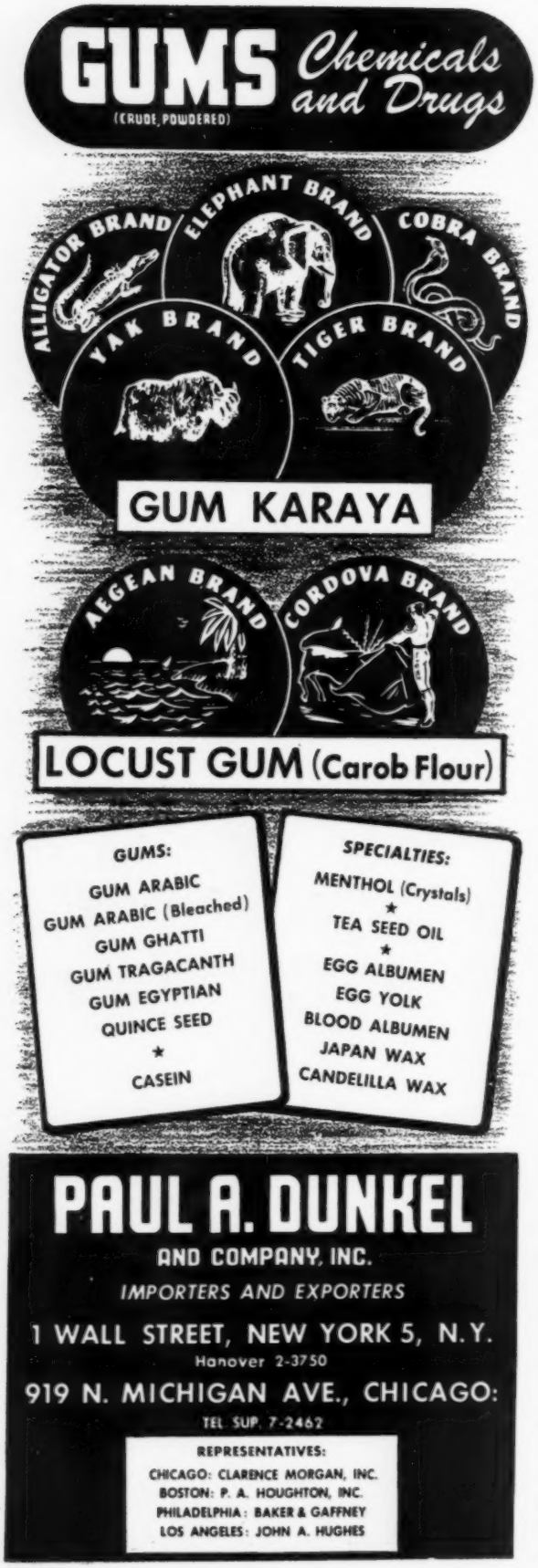

gummy or resinous there may be a tendency for a valve clogging. Also crystalline materials commonly used in alcoholic perfumes may tend to precipitate out upon cooling, or may crystallize in the dispensing nozzle.

It should also be noted that many perfume oils, heretofore considered satisfactory in their present containers, may tend to discolor in contact with metal or may react with the metal of the container

Corrosion is an important factor in cosmetic self-dispensing packages. Tests should be run in pressure bottles with the complete formulation and including all valve parts, plus strips of container metal. The test strips should be so suspended in the solution so as to be partially in the gas phase and partially in the liquid phase. With a test of this type, corrosion can be observed daily without destruction of the test.

Although much work has been done on the corrosion aspects of alcohol, propellant and aluminum combinations, it is urged that no generalizations be drawn from this data and, that each product must be individually tested before marketing. Each product should be shelf tested at elevated temperatures for several months.

No attempt has been made to cover all the points in product development, but merely to point out to those interested in cosmetic self-dispensing packages some of the problems involved.

Several products, of the types under discussion, have been already marketed or are about to be introduced. The Dorothy Gray Division of Lehn and Fink Products Corporation has begun marketing the Dorothy Gray Deodorant Atomist, an underarm deodorant in a 2 oz. Sun tube container. It was first introduced in the Mid-west and is now also currently being sold in the New York metropolitan area. Douglas Laboratories have completed their test campaign on Coppertone Suntan oil and Isofoam Sunburn Relief. The test was extremely successful with national distribution in the immediate future. Carter Products test-marketed Rise Shaving Cream in Pennsylvania and has now been extended to Binghamton, N. Y. and Washington, D. C. George Barr & Company, producers of "Soft Answer" and "Happy Talk" reports sales as excellent. Revlon Products will soon introduce their "Snow Creme" shampoo.

No one can predict the ultimate effect of the self-dispensing package upon the cosmetic industry. New products and new packages now in the laboratory stages will soon make their appearance. It can safely be predicted that within the very near future the cosmetic aerosol will be packed in glass. The glass package will have the following advantages:

1. Elimination of the corrosion problem.
2. Greater individuality in container design.
3. Cosmetics have always been purchased in glass.

It cannot be too strongly urged that caution should be observed relative to the glass package. Correctly done, the glass dispenser can add immeasurably to the status of the cosmetic industry . . . a defective glass package can be a serious setback to an otherwise expanding industry.

Medicated Bandages and Dressings

(*Continued from page 40*)

Pertinent in this connection is a patented method[16] for utilizing the oligodynamic action of silver in the production of permanently sterile bandages, absorbent cotton and surgical sponges. In one example, cotton gauze is impregnated with a saturated solution of aluminum formate, dried, and then dipped into a 0.25 per cent solution of silver acetate, preheated to 70°C. This yields an antibacterial dressing impregnated with aluminum hydroxide and silver.

Another surgical dressing (Nu-San), being sold both in this country and in England, is made by impregnating gauze with an emulsion containing copper guaiacol sulfonate and 5-aminoacridine hydrochloride. In the presence of moisture from a burn or wound, the chemical constituents are slowly released and a constant antisepsis is maintained.

As a matter of fact, the antiseptic dyes hold a rather prominent position as impregnants for making antibacterial dressings. In Britain, for example, the aminoacridines have found rather extensive use for this purpose. In the early days, there were those[17] who thought that the cotton fibers of the dressings retained so much of the acridine dye that none was available to act on the bacteria. However, Savage[18] showed that gauze containing only 1 per cent of proflavine (2: 8 diaminoacridine) was capable of preventing any increase in the number of bacteria. Others[19] have confirmed this finding.

Albert[20] also found that a 1 per cent euflavine gauze is superior to a proflavine gauze of the same strength with respect to bactericidal action. The B.P.C. provides standards for euflavine gauze. It also gives data on the use of euflavine lint in the production of three types of burn dressings. The same text also provides information on the production and requirements of trinitrophenol (picric acid) gauze, which was much used in the treatment of burns.

Bandages with antibacterial effects based on the presence of sulfonamides were quite popular at one time, but nowadays they are not widely used. Indeed, restrictions have been placed on the sale of such bandages both in this country and in Europe.[21] Of course, quite a number of methods for making sulfa-containing dressings were developed and some processes were patented.[22,23,24] One British product is described by its manufacturer as a wide mesh muslin impregnated with 5 per cent sulfathiazole in petrolatum base. It is intended for the treatment of septic and potentially septic wounds, burns, ulcers and sloughs. Another dressing, which is sold both here and in England, consists of a wide mesh gauze impregnated with 2 per cent urethane and 5 per cent sulfanilamide in a wool alcohol emulsion base. It is said to be analgesic, bacteriostatic, deodorizing and healing.

The idea of using penicillin in a bandage is not a new one. Indeed, in the early days when this antibiotic was in very short supply, it was suggested that gauze

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pads be impregnated with a suitable culture medium and then inoculated with *Penicillium notatum*. The penicillin thus produced in the dressings proved to be effective in controlling surface infections.[25,26] Now, of course, such measures are not necessary and methods have been devised to prepare more elegant and more stable penicillin dressings.

In one indicative process,[27] a fibrous material such as cotton gauze, absorbent cotton, fabrics of glass fibers, Nylon, cellulose acetate or spun viscose is impregnated with a sterile solution of a salt of penicillin adjusted to a pH of 5.5 to 7.5. The dressing is dried to a constant weight and packed in a moisture-proof container. The dressings are said to be stable and the penicillin content is recoverable by soaking the dressings in water. A commercial product of British origin is described[28] as a 2 mm. mesh tulle impregnated with an emulsifying base of soft paraffin and anhydrous lanolin containing 1,000 units of penicillin per gram, equivalent to 160 units per square inch.

With the exception of a small first-aid type of adhesive bandage with a tyrothricia—containing gauze pad, it does not appear that other antibiotics have found application in the manufacture of ready-to-use medicated bandages or dressings.

Hemostatic dressings, which comprise the third major class, may be divided into two subgroups. The first includes products made by causing fibrous materials to adsorb or absorb compounds with stypic action. Styptic cotton is no doubt the best known of these old-fashioned products. A standard preparation of this sort is provided by both Prinz[29] and Cipes[30] in describing a method for making styptic cotton, as follows:

Solution of ferric chloride	**80 parts**
Glycerine	**16 "**
Water	**225 "**
Purified cotton	**100 "**

Mix the liquids and allow the cotton to steep for one hour in the resulting solution. Remove, press out, and allow to dry in thin layers in a warm place protected from light. When dry, transfer to well-closed glass containers.

The second subgroup, which has largely replaced the older type, consists of fibrous hemostatic dressings made from oxidized cellulose and from alginates. Although, in a strict sense, these are not medicated dressings, they warrant brief discussion here. As was pointed out in a review[31] of the newer hemostatics, the cellulose of surgical gauze and cotton can be rendered soluble and absorbable by oxidation. The oxidized cellulose gauze is more pliable and is easier to pack into bleeding wounds than ordinary surgical gauze. When wet with blood, the oxidized cellulose becomes sticky, softens and swells, and forms a dark brown gelatinous mass with an efficient hemostatic action.

Of more recent origin, alginate dressings are made by a different method from substances derived from a

seaweed. To make the alginate filaments, sodium alginate solution is extracted through fine jets into a coagulating bath of calcuim chloride. The resulting calcium alginate filaments are drawn together into a yarn, dried and finished.[32] As noted by Bonniksen,[33] calcium alginate fabrics possess a high strength and are advantageous in surgery because they are hemostatic and are a absorbable in body tissues. It has been pointed out[34] that alginate dressings can be sterilized by heat and have no action on the system after absorption. As the solubility varies according to the number of sodium ions present, dressings of various rates of absorption can be prepared, and at the time of manufacture different antibacterial substances can be incorporated. When applied to wounds they have a hemostatic action and provide only a poor culture medium for bacterial growth. After their slow absorption there is no excessive formation of fibrous tissue.

From this and from other sources, it seems that there is a definite trend toward the use of new and specialized fibers in the production of bandages and dressings. Thus, according to one recent patent,[35] regenerated cellulose sheet material (e.g. cellophane) is impregnated with a germicidal compound. The sheet is then cut into fine strips which are woven into a fabric that forms a useful aseptic bandage.

A similar suggestion has been made with respect to bandages and dressings made from glass fibers. Citing the many advantages of such a product, Le Lous[36] also notes that the glass fiber dressings can be made to serve as vehicles for various medicinal or antiseptic substances. Of related interest is a sponge-like surgical dressing made from starch which can be used as a vehicle for the internal administration of such drugs as penicillin, gramicidin and sulfapyridial. When implanted in the body, the surgical dressing dissolves slowly in the body fluids over a period of several days and the dissolved material is absorbed by the tissues without harmful effects. Methods for making the starch sponge dressings and for incorporating the therapeutic agents are given by Bice and MacMasters[37] in a patent which has been assigned to the people of the United States.

The use of preformed medicated films as wound and lesion dressings is another development with interesting potentialities. Thus, in 1942, Pickrell[38] prepared the following film dressing and used it in 50 cases of burns and in a number of other types of wounds:

Sulfanilamide or sulfadiazine	**3.0 per cent**
Methyl cellulose	**2.5 " "**
Triethanolamine	**3.0 " "**
Sorbitol	**0.5 " "**
Alcohol (50%) or acetone, to make	**100.0 " "**

This preparation is sprayed on glass and when dry is removed as a single sheet that can be sterilized by heat. Since the film is transluscent, the injured area to which it is applied can be inspected without removing the dressing.

Also illustrative of the possibilities of this class of

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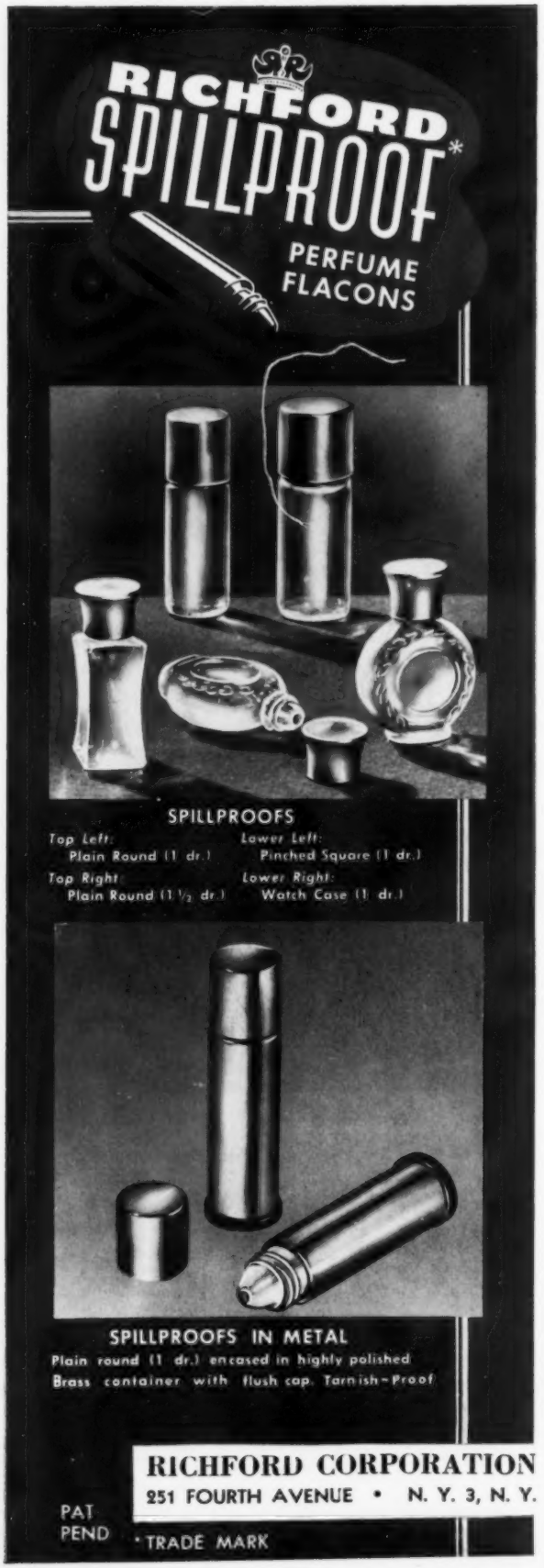

product is a patent[39] describing methods for making composite therapeutic films. The chief advantage of these medicated dressings is that they permit the simultaneous application of ordinarily incompatible compounds. Multiple medicated films, prepared in layers, provide this unique effect.

Another possibility is indicated in a product recently imported from England. It is a film-like, transparent bandage which not only provides the effects of an elastic, supportive bandage, but also serves as a source of salicylate to yield a topical analgesic action. The plastic, pain-relieving and supportive bandage, sold under the name Polyestol, is described[40] as an elastomer produced by reacting methyl salicylate with a mixture of polymerized thermoplastic resins, modified waxes and esters. The reaction is reversible and results in a gradual release of methyl salicylate at the place of use.

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Automatic Distribution

(Continued from page 41)

the traffic center and the right location, then there would seem to be endless opportunities for expansion. People like to congregate and they do it in a multitude of ways, in working, in home selection and for pleasure. Only a few large retailers have made use of venders for the convenience of there own employees, but one large store is said to have leased over 90 machines for use in employee rest rooms. Many large factories, office buildings and apartment houses contain more people than the total clientele of an average retailer.

Retailing is showing in many ways a growing recognition that this era of traffic congestion, full employment and increasing employment of women, is the age of customer convenience in shopping.

Suburban stores of department stores, the centralized suburban shopping centers, mobile retail stores and

the growth in house-to-house selling and super market self-service all point in that direction, and are all aspects of the coming competitive fight to make it easy and convenient to buy.

The vender, by locating right where people are anyway—in factories and offices, in homes (apartments), at sports and travel, is an extension of this principle of customer convenience. It is a machine; it's cold and impersonal but machines can be made to talk and visualize.

We may expect the development of machine vending to produce machines which will give a clear product display, sell the product with a capital letter voice and demonstrate with a snappy moving picture. What more can we buyers ask for?

Proprietary Ass'n Meeting

(Continued from page 45)

"Therefore I feel on fairly solid ground when I say that the impressive amount of home medication that exists today is not based solely on the fact that it is cheap. It is deeply rooted in the psychological and physical nature of man. It existed before advertising was invented, and it remains strong in the face of free medicine by the government. Its importance should be recognized by anyone studying the health of the nation or the world."

Dr. Frederick J. Cullen, executive vice-president of the Proprietary Association, said:

"Your advisory Committee on Advertising has reason to be discouraged when it observes the present trend in advertising. For approximately eighteen months we have noted copy of all sizes, including full-page ads, that in our opinion are not within the letter or the spirit of the law. Such advertising results in unfavorable comment on proprietary medicine advertising as a whole. It is true that such copy is used by a minority of advertisers; but, regardless of that fact, it is flashy copy and attracts adverse comment which is detrimental to the advertising of the entire industry.

"When we of the Advisory Committee on Advertising give further consideration to this advertising trend, we realize that we have seen full-page ads for certain types of medicines come and go along with the product, because such advertising, as a rule, is not based on a sound and efficacious product. Therefore, both product and advertising must soon disappear. We are hoping that the present advertising trend, which is resulting in a type of copy that is not in the best interests of either the consumer or the manufacturer, will soon disappear, and if necessary the product also. It must be realized that if this type of advertising continues, the manufacturer can expect more drastic controls to be applied to copy through Federal and/or State legislation."

Association Counsel James F. Hoge called attention to the conflicting control by two Government agencies when he said:

"Dual and conflicting jurisdiction still shows itself between the Federal Trade Commission and the Food

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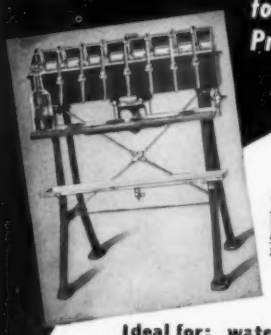

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and Drug Administration. Continuing examples are the so-called "headache cases" in which companies with warnings in their labeling which have been at least tacitly accepted by the Food and Drug Administration and have been used for a full decade, are not agreeable to the Federal Trade Commission which, eight years ago, instituted proceedings to compel warnings more agreeable to the version of what its medical director thinks they should be.

"The latest examples are the antihistamine cases. In the complaints in several of these cases, the Commission alleges that the products, when taken as directed, may be unsafe. This allegation is made in the face of the fact that prior to such Commission complaints the Food and Drug Administration determined under the New Drug Section of the Food, Drug and Cosmetic Act that the products, when taken as directed, are safe.

"One of the respondent companies has brought the issue into focus by a motion to strike such allegations from the complaint. The motion sets up the New Drug provisions and avers that the Food and Drug Administration's decision to make an application effective under that Section was an official determination in the nature of a license and, as such, stands as an adjudication binding on all other Federal governmental administrative agencies; that there is, accordingly, a lack of jurisdiction on the part of the Commission to review or attack the finding of the Food and Drug Administration."

Olfactory Preference

(*Continued from page 47*)

Results: A comparison of the preferential responses of the first four age groups is presented in Table I.

TABLE I.
Percentages "Pleasant" Responses of Four Age Groups.

	Pre-School	*3rd Gr.*	*7th Gr.*	
Stimulus	*3-5*	*8-9*	*12-14*	*Adults*
Aldehyde Perfume	57	67	79	95
Oil of Patchouli	39	33	0	37
Alpha-Ionone	38	40	9	36
Di-p-cresyl Carbonate	36	38	24	32
Cottonseed Oil	47	39	38	24
Diethyl Sebacate	28	37	24	20
Benzyl Benzoate	42	44	37	53
Lauryl Mercaptan	31	36	0	2
Musk Xylol	45	34	23	78
Amyl Phenyl Acetate	34	22	16	9
Mean	40.7	39.0	25.0	39.1

The number (N) of observers for a given odor is variable since our interest was in some 22 odors, only 15 of which were exposed to a given observer. Hence, for adult responses N = 80 – 100, while for younger groups N = 20 – 30. None of the infrequent "neutral" responses are included in the count.

At all ages large individual differences were observed in ability to identify odors. As might be expected, the adults possessed the greatest number of associations leading to readier identification; however, one eight year old girl was as apt as any adult in identifying and/or describing the odors. In contrast, some of the children at the eight year level could identify none of

the 15 samples positively. This inability to identify is perhaps not too surprising since a majority of the odors were deliberately selected as generally unfamiliar, and only remotely resembled object smells with which children are familiar. The ability to classify odors as pleasant or unpleasant was also highly variable. One three month old infant and a two year old baby were more definite and more consistent than many of the older subjects.

It must be pointed out that the data in Table I were collected in less than ideal conditions and are insufficiently complete to justify extensive interpretation; nevertheless, a number of trends are evident.

1. In general, an odor which is unpleasant for an adult is also unpleasant for the child, evidenced by the fact that all four groups are consistent in the majority preference for eight of the ten odors. (The two exceptions of the forty possibilities are the result of greater adult tolerance.)
2. The early adolescents, 12-14 years old, are less tolerant than any other age group tested, a trend which is substantiated by vehement verbal reports. (This is not the first indication that one of the personality traits of early adolescents is dogmatism.)
3. Highest pleasantness ratings are obtained from the youngest group, which trend may have resulted from our inability to communicate successfully the nature of the judgment required, or from a greater tolerance. The consistency obtained when the odors were resubmitted supports the latter hypothesis.

In partial comparisons we learned that peppermint was judged pleasant by 78% of the pre-school and by 83% of the seventh graders. Isobutyl ketone by 78% and 87% respectively. Other comparisons of the children are presented in Table II.

TABLE II.

Per Cent Positive Responses to Four Odors by Three Age Groups

Stimulus	*3-5*	*8-9*	*12-14*
Spearmint	55%	96%	91%
Phenylethyl Alcohol	15%	36%	14%
Amyl Acetate	42%	53%	70%
Acetic Acid	31%	33%	8%
Mean	35.8%	54.5%	45.8%

It was surprising to note how many of the nursery age rejected the spearmint, an odor highly acceptable to older children. Use of spearmint in flavoring children's medicine may account for the difference. The third graders were most tolerant for the phenylethyl alcohol and the acetic acid, but the amyl acetate which was most familiar to the 13 year olds was accepted by them as pleasant. On the other hand, with acetic acid for this same older group familiarity seemed to breed contempt; however, this rejection can more likely be laid to the dogmatism noted above, leaving only the amyl acetate as an unusual response to be explained. The girls associated amyl acetate with applying finger nail polish, while the boys identified it with model construction both pleasant activities.

So far we have discussed only the reactions of persons

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under thirty years. To determine to what extent preference changes with advancing years, eleven odors were presented to a group of men and women from 50 years of age upward. Their responses are compared with the younger groups in the following table into which some of the odorants already discussed are incorporated.

TABLE III.

Per Cent "Pleasant" Responses of Five Age Groups

Stimulus	*3-5*	*8-9*	*12-14*	*18-30*	*Over-50*
Spearmint	55	96	91	90	86
Amyl Acetate	42	53	70	73	68
Musk Xylol	45	34	23	78	59
Cottonseed Oil	47	39	38	24	45
Benzyl Benzoate	42	44	37	58	32
Alpha Ionone	38	40	9	36	65
Oil of Patchouli	39	33	0	37	59
Phenyl Ethyl Alcohol	15	36	14	77	60
Diethyl Sebacate	28	37	24	20	41
Amyl Phenyl Acetate	34	22	16	9	45
Acetic Acid	31	33	8	17	57
Mean	37.8	42.4	30.0	47.2	56.1

It will be noted that the reactions of the older group, on the right, is in the direction of greater tolerance and approximates most nearly the other adult group. The highest positive correlations obtain between the third and seventh graders, and between the pre-school and young adults classes. Least agreement is found when the early adolescent and old age groups are compared. Perhaps, this difference is related to the expressions of alarm of older people concerning the actions of the "younger generation." In any event, the younger ones display more definite likes and dislikes.

Age and Sensitivity: From the sniffing behavior of the different age groups and from the comments elicited, it is apparent that the groups are all about equally sensitive to odors. We will explore this relationship more completely in another paper in which threshold values are made with a new olfactometer. At the moment we have little evidence that sensitivity is generally greater or less at either age extreme.

Influence of Sex: We have already pointed out that the 12-14 year section was most definite in preferential and rejection responses. For that reason, a comparison of the reactions of the two sexes within this group are presented in Table IV.

TABLE IV.

Comparison of the Preferential Responses of Boys and Girls (12-14) for Twenty-Two Different Odors.

Boys		Girls	
Pleasant	*Unpleasant*	*Unpleasant*	*Pleasant*
34.8%	65.2%	30.6%	69.4%

Before summarizing, I should like to describe a unique experiment in which this same 12-14 year old group participated. Our objective was to learn whether or not odor response might be employed rather than taste materials such as phenyl thio carbamide (PTC) in tracing genealogy.

Since so many of the odors tested proved preferentially ambivalent and were consistently identified

as different materials it is conceivable that we might be able to predict reaction to the taste of PTC from it. Some 65% of the *genus homo*, upon tasting PTC, find it bitter; the rest report a very weak response or no taste at all. Incidentally, PTC is often mistakenly referred to as a test of "taste blindness."[5] Actually, it is not a measure of taste sensitivity any more than a test for color weakness measures visual acuity. It is only a check of a sex-linked recessive genetic trait.[6]

After each subject had completed his olfactory preference, he tasted a sample of the PTC powder. There is no mistaking the response to this material, since the majority find even a minute quantity extremely bitter. The results were completely negative for the odors employed in this test of an analogy. It is possible, of course, that the definitive odors have not yet been found. An odor such as civet, to which some observers are strikingly more sensitive than others, may be a more appropriate substance. Although it is difficult to believe that any small test with odors would be as convincing genetically as PTC, in view of the unexplained general inconsistency of odor response, it might prove to be a valuable auxiliary measure, once optimal odors are located.

Summary: The hedonic properties of a number of odors were analyzed by five different age groups ranging from pre-school to old age. Some of the odors were unfamiliar to all subjects and some were familiar, the number depending on the age. With or without familiarity and associations it was found that the children and adults in general accepted and rejected the same odors. Greatest tolerance was exhibited by the pre-school and over-fifty ages, and least tolerance by the 12-14 year group. This tolerance cannot be attributed to low sensitivity until additional measurements are made. Similarly, the lower female tolerance cannot yet be ascribed to a more sensitive sense of smell in women. Differences in training and personality may partially account for the discrepancies found.

The difficulty of locating either a universally acceptable or universally unpleasant odor is shown. An experiment is described in which preferential responses to different odors was correlated with the taste reaction to Phenyl-thio-carbamide. It may be that the wrong odors were chosen; but, in any event, no prediction of taste response was possible.

The methods employed have been extended to infants some of whom respond as definitely as the older individuals. It is not possible then to conclude that the differences in preference are due to the state of development of the receptors, but may rather be related to the experience of the observer.

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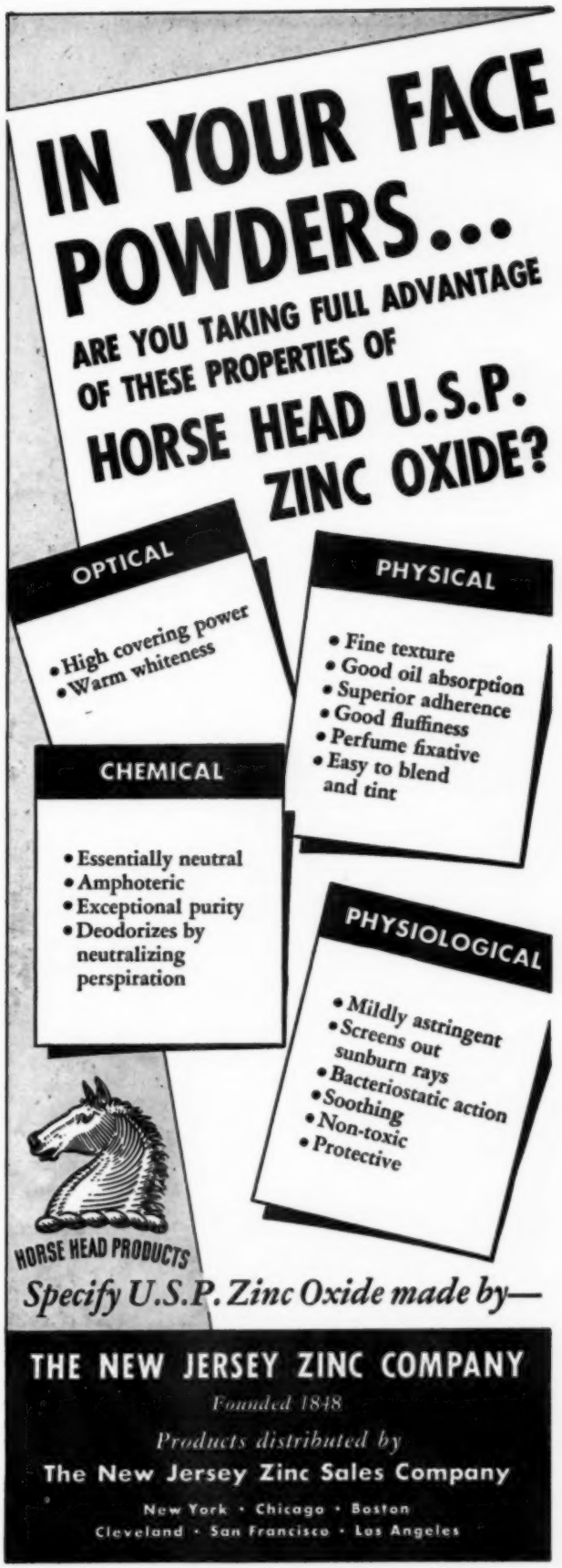

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